A Book of Kerala Birds

K.K.Neelakantan
C.Sashikumar
R.Venugopalan

A BOOK OF KERALA BIRDS (Part I) will serve as a companion volume to Dr. Salim Ali's BIRDS OF KERALA and thus fills the lacunae in ornithological literature of this bird-rich State.

95 species and subspecies not included or only mentioned in passing in the BIRDS OF KERALA are described in detail. 28 birds are illustrated in colour and 12 in black and white. A complete and uptodate checklist of the birds of Kerala is also provided.

Late Prof. K.K. Neelakantan, the renowned ornithologist, had devoted most of his time during the last two years of his life for the preparation of this book. His knowledge on the avifauna of Kerala from studies spanning over five decades has been utilised to a great extent in this book.

A BOOK OF
KERALA BIRDS

Part I

Compiled and edited by

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Kerala State Committee
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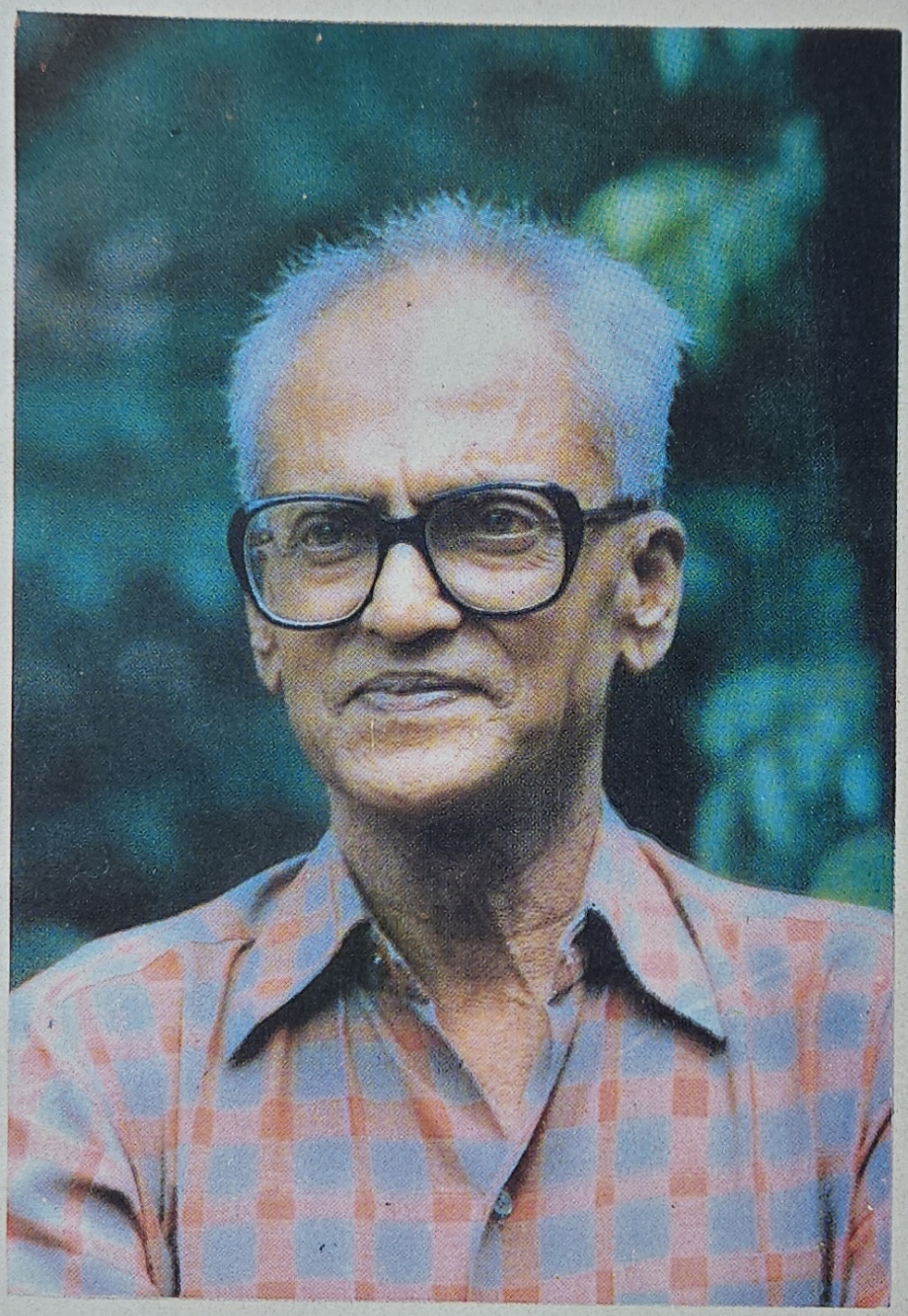

PROF. K.K. NEELAKANTAN
(1923 - 1992)

PROF. K.K. NEELAKANTAN

Prof. K.K. Neelakantan, the Principal Editor of this volume passed away on 14-6-1992. The greatest tribute that could be paid to KKN (as he was affectionately known to his friends) would be to simply say that but for him this book would have been impossible. He enthused and inspired a whole generation of bird-watchers. His seminal works in Malayalam are largely responsible for the popularity that bird-watching enjoys in Kerala today. He was also a brilliant wildlife artist choosing to illustrate all his works himself. Even his critics grudgingly admitted his uncompromising scientific temperament. His role in the documentation of the bird-life of Kerala is unparalleled. Nothing gave him greater pleasure than sharing his vast knowledge with fellow birdwatchers, and encouraging them to explore nature on their own. This book, we hope, is a memorial worthy of him.

R V
C S K

PUBLISHER'S PREFACE

World Wide Fund For Nature-India (WWF-India) the country's largest non-political, non-governmental conservation organisation has great pleasure in placing before the bird loving public a book entitled **"A Book of Kerala Birds"** compiled and edited by the renowned ornithologist late Prof. K.K. Neelakantan, on behalf of THANAL, a registered Society for Conservation, Action and Information Network based in Cannanore. Prof. Neelakantan had published a number of highly informative books and articles on birds. The present book was his last effort which he undertook for THANAL.

Prof. Neelakantan had been closely associated with WWF-India and had been member of the Kerala State Committee from its very inception till his demise on 14th June 1992. Because of his close identity with the affairs of the Kerala State Committe, Prof. Neelakantan on behalf of THANAL, had agreed to give copyright of the first edition of this book to the Committee. By publishing this book, WWF-India is fulfilling Prof. Neelakantan's cherished objective of disseminating information on Kerala Birds. I hope that this book will be well received by environmentalists and bird lovers.

A.P. UDAYABHANU
CHAIRPERSON
WWF-INDIA
KERALA STATE COMMITTEE

Thiruvananthapuram
03-05-1993

CONTENTS

PUBLISHER'S PREFACE viii

INTRODUCTION & ACKNOWLEDGEMENTS xvii

NOTES ON THE TEXT WITH 2 DIAGRAMS SHOWING THE EXTERNAL FEATURES OF A BIRD xxi

GLOSSARY xxviii

LIST OF ILLUSTRATIONS xxxii

DESCRIPTIVE TEXT 1-100

ADDITIONAL INFORMATION 101

APPENDIX-I :CHECKLIST OF THE BIRDS OF KERALA 105

APPENDIX-II : 132

1. List of persons who provided information in response to THANAL's appeal 132
2. List of persons who, in response to the appeal, provided only their bio data 133
3. List of persons from whom information was obtained by personal communication or through their published papers or articles 134
4. Abbreviations of the names of persons frequently referred to in the text 135
5. Miscellaneous abbreviations 135
6. List of persons from whose published papers or articles information was obtained 135

BIBLIOGRAPHY 137

INDEX OF ENGLISH NAMES 140

INDEX OF SCIENTIFIC NAMES 142

SYSTEMATIC LIST OF BIRDS

Sl.No.	HAND BOOK Number	Common name & Scientific name	Page
		Order PELECANIFORMES	
		Family PHAETHONTIDAE : Tropic-birds.	
1	17	Redbilled or Short-tailed Tropic Bird *Phaethon aethereus indicus* Hume	1

		Family SULIDAE : Boobies	
2	23	Masked Booby *Sula dactylatra melanops* Heuglin	1
3	25	Brown Booby *Sula leucogaster plotus* (Forster)	3
		Family PHALACROCORACIDAE : Cormorants and Darter	
4	26	Large Cormorant *Phalacrocorax carbo sinensis* (Shaw)	4
5	27	Shag *Phalacrocorax fuscicollis* Stephens	6
		Family FREGATIDAE : Frigate Birds	
6	32	Least Frigate Bird *Fregata ariel iredalei* Mathews	7
		Order CICONIIFORMES	
		Family ARDEIDAE : Herons, Egrets and Bitterns	
7	[55	Little Bittern *Ixobrychus minutus minutus* (Linnaeus)]	8
		Family CICONIIDAE : Storks	
8	60	Painted Stork *Mycteria leucocephala* (Pennant)	9
9	63	White Sork *Ciconia ciconia ciconia* (Linnaeus)	10
10	65	Black stork *Ciconia nigra* (Linnaeus)	11
		Family THRESKIORNITHIDAE : Ibises, Spoonbill	
11	70	Black Ibis *Pseudibis papillosa papillosa* (Temminck)	12
12	71	Glossy Ibis *Plegadis falcinellus falcinellus* (Linnaeus)	13
13	72	Spoonbill *Platalea leucorodia major* Temminck & Schlegel	14
		Family PHOENICOPTERIDAE : Flamingos	
14	73	The Flamingo or Greater Flamingo *Phoenicopterus roseus* Pallas	16
		Order ANSERIFORMES	
		Family ANATIDAE : Geese, Ducks	
15	82	Barheaded Goose *Anser indicus* (Latham)	17

16	[89	Large Whistling Teal *Dendrocygna bicolor* (Vieillot)]	18
17	90	Ruddy Shelduck *Tadorna ferruginea* (Pallas)	19
18	93	Pintail *Anas acuta* Linnaeus	20
19	97	Spotbill Duck *Anas poecilorhyncha poecilorhyncha* J.R.Forster	21
20	101	Gadwall *Anas strepera strepera* Linnaeus	22
21	115	Nakta or Comb Duck *Sarkidiornis melanotos melanotos* (Pennant)	22

Order FALCONIFORMES

Family ACCIPITRIDAE : Hawks, Vultures

22	172a	Whitetailed Eagle *Haliaeetus albicilla* (Linnaeus)	23
23	179	Cinereous Vulture *Aegypius monachus* (Linnaeus)	24

Family FALCONIDAE:Falcons

24	208	Laggar Falcon *Falco biarmicus jugger* J.E.Gray	25

Order GALLIFORMES

Family PHASIANIDAE: Pheasants, Partridges, Quails

25	250	Grey Quail *Coturnix coturnix coturnix* (Linnaeus)	26
26	275	Red Spurfowl *Galloperdix spadicea spadicea* (Gmelin)	27
27	278	Painted Spurfowl *Galloperdix lunulata* (Valenciennes)	28

Order GRUIFORMES

Family TURNICIDAE : Bustard-Quails

28	313	Little Bustard-Quail *Turnix sylvatica dussumier* (Temminck)	29

Family RALLIDAE : Rails, Coots

29	350	Coot *Fulica atra atra* Linnaeus	29

Family OTIDIDAE : Bustards

30	355	Houbara Bustard *Chlamydotis undulata macqueenii* (J.E.Gray)	31

Order CHADRIIFORMES

Family CHARADRIIDAE

Subfamily CHARADRIINAE : Plovers

31	371	Grey or Blackbellied Plover *Pluvialis squatarola* (Linnaeus)	31
32	380	Little Ringed Plover *Charadrius dubius jerdoni* (Legge)	33

Subfamily SCOLOPACINAE:Curlews, Sandpipers, Snipe, Woodcock

33	389	Blacktailed Godwit *Limosa limosa limosa* (Linnaeus)	36
34	391	Bartailed Godwit *Limosa lapponica lapponica* (Linnaeus)	37
35	400	Terek Sandpiper *Tringa terek* (Latham)	38
36	407	Swinhoe's Snipe *Gallinago megala* Swinhoe	39
37	413	Eastern Knot *Calidris tenuirostris* (Horsfield)	39
38	414	Sanderling *Calidris alba* (Pallas)	40
39	417	Temminck's Stint *Calidris temminckii* (Leisler)	41
40	420	Dunlin *Calidris alpina alpina* (Linnaeus)	42
41	423	Spoonbilled Sandpiper *Eurynorhynchus pygmaeus* (Linnaeus)	43
42	426	Ruff *Philomachus pugnax* (Linnaeus)	44

Family RECURVIROSTRIDAE : Stilts, Avocets

43	430	Blackwinged Stilt *Himantopus himantopus himantopus* (Linnaeus)	45
44	432	Avocet *Recurvirostra avosetta* Linnaeus	46

Family DROMADIDAE : Crab Plover

45	434	Crab Plover *Dromas ardeola* Paykull	47

Family BURHINIDAE : Stone Curlew, Thick-knees

46 437 Great Stone Plover 48
Esacus magnirostris recurvirostris (Cuvier)

Family GLAREOLIDAE : Coursers, Pratincoles

47 443 Large Indian (Oriental) Pratincole 49
or Swallow-Plover
Glareola pratincola maldivarum J.R. Forster

Family LARIDAE : Gulls, Terns

48 450 Yellowlegged Herring Gull 50
Larus argentatus heuglini Bree

48a 451 Pinklegged Herring Gull 50
Larus argentatus mongolicus Sushkin

49 463 River Tern 51
Sterna aurantia J.E.Gray

50 467 Whitecheeked Tern 53
Sterna repressa Hartert

51 469 Blacknaped Tern 100
Sterna sumatrana Raffles

52 470 Blackbellied Tern 54
Sterna acuticauda J.E.Gray

53 471? Brownwinged Tern 55
Sterna anaethetus (anaethetus ?) Scopoli

54 474 Sooty Tern 56
Sterna fuscata nubilosa Sparrman

55 476 Saunders's Little Tern 57
Sterna saundersi Hume

56 480 Sandwich Tern 57
Sterna sandvicensis Latham

Order COLUMBIFORMES

Family COLUMBIDAE : Pigeons, Doves

57 531 Western Turtle Dove 59
Streptopelia orientalis meena (Sykes)

Order PSITTACIFORMES

Family PSITTACIDAE : Parrots

58 [546 Large Ceylonese (Alexandrine) Parakeet 60
Psittacula eupatria eupatria (Linnaeus)]

		Order CUCULIFORMES	
		Family CUCULIDAE : Cuckoos	
59	581	Small Cuckoo *Cuculus poliocephalus poliocephalus* Latham	61
		Order STRIGIFORMES	
		Family STRIGIDAE	
		Subfamily TYTONINAE : Barn Owls	
60	610a	Peninsular Bay Owl *Phodilus badius ripleyi* Hussain and Khan	62
		Subfamily STRIGINAE : Owls	
61	617	Peninsular Scops Owl *Otus scops rufipennis* (Sharpe)	64
62	[663	Longeared Owl *Asio otus otus* (Linnaeus)]	65
		Order APODIFORMES	
		Family APODIDAE	
		Subfamily APODINAE : Swifts	
63	700	Blyth's or Himalayan Whiterumped Swift *Apus pacificus leuconyx* (Blyth)	66
		Order CORACIIFORMES	
		Family BUCEROTIDAE : Hornbills	
64	767	Common Grey Hornbill *Tockus birostris* (Scopoli)	67
		Order PICIFORMES	
		Family CAPITONIDAE : Barbets	
65	781	Western Green Barbet *Megalaima zeylanica inornata* Walden	70
		Family PICIDAE	
		Subfamily JYNGINAE : Wrynecks	
66	796	Wryneck *Jynx torquilla torquilla* Linnaeus	71

Order PASSERIFORMES

		Family ALAUDIDAE : Larks	
67	883	Rufoustailed Finch-Lark *Ammomanes phoenicurus testaceus* Koelz	72
		Family HIRUNDINIDAE : Swallows	
68	912	Plain Sand Martin *Riparia paludicola* (Vieillot)	73
69	913	Crag Martin *Hirundo rupestris* Scopoli	74
70	921	Wiretailed Swallow *Hirundo smithii filifera* Stephens	75
71	922	Cliff Swallow *Hirundo fluvicola* Blyth	76
72	925	Himalayan Striated Swallow *Hirundo daurica nipalensis* Hodgson	77
73	930	European House Martin *Delichon urbica urbica* (Linnaeus)	78
		Family LANIIDAE : Shrikes	
74	933	Indian Grey Shrike ? *Lanius excubitor (lahtora* (Sykes) ?)	79
		Family CAMPEPHAGIDAE : Cuckoo-Shrikes, Minivets	
75	1089a	Ashy Minivet *Pericrocotus divaricatus divaricatus* (Raffles)	80
		Family MUSCICAPIDAE	
		Subfamily TIMALIINAE : Babblers	
76	1231	Yelloweyed Babbler *Chrysomma sinense sinense* (Gmelin)	81
77	1307	Nilgiri Laughing Thrush *Garrulax cachinnans* (Jerdon)	82
		Subfamily SYLVIINAE : Warblers	
78	1543	Pallas's Siberian Grasshopper Warbler *Locustella certhiola rubescens* Blyth	83
79	1565	Eastern Orphean Warbler *Sylvia hortensis jerdoni* (Blyth)	83
80	1570?	Lesser Whitethroat *Sylvia curruca* (Linnaeus)	84
81	1578	Tytler's Leaf-Warbler *Phylloscopus tytleri* Brooks	85
		Subfamily TURDINAE : Thrushes, Chats	
82	[1637	Rufousbellied Shortwing *Brachypteryx major major* (Jerdon)]	86

83	[1660?	Rufousbellied Bush Robin? *Erithacus hyperythrus* (Blyth)]	87
84	1672	Eastern Black Redstart *Phoenicurus ochruros rufiventris* (Vieillot)	88
85	1710	Desert Wheatear *Oenanthe deserti (deserti* (Temminck)?)	89
86	1733	Orangeheaded Ground Thrush *Zoothera citrina citrina* (Latham)	91
		Family SITTIDAE Subfamily SITTINAE : Nuthatches	
87	1830	Peninsular Chestnutbellied Nuthatch *Sitta castanea castanea* Lesson	92
		Family MOTACILLIDAE : Pipits, Wagtails	
88	1877	Yellowbacked Wagtail *Motacilla flava lutea* (Gmelin)	95
89	1878	Turkestan Blackheaded Wagtail *Motacilla flava melanogrisea* (Homeyer)	95
90	1882	Western Yellowheaded Wagtail *Motacilla citreola werae* (Buturlin)	95
91	1886	Masked Wagtail *Motacilla alba personata* Gould	96
		Family PLOCEIDAE Subfamily ESTRILDINAE : Munias	
92	1964	Red Munia or Avadavat *Estrilda amandava amandava* (Linnaeus)	97
93	1965	Green Munia *Estrilda formosa* (Latham)	98
		Order PODICIPEDIFORMES	
		Family PODICIPEDIDAE : Grebes	
94	[3 ?	Great Crested Grebe? *Podiceps cristatus cristatus* (Linnaeus)?]	99
		Order PASSERIFORMES	
		Family STURNIDAE : Starlings	
95	997-1001	Starling *Sturnus vulgaris* Linnaeus	103

INTRODUCTION

Dr. Salim Ali's *BIRDS OF KERALA*, first published in 1969, when reprinted by Oxford University Press in 1984 differed from the 1969 edition only in that it carried the following brief note by the author:

"The second edition of *BIRDS OF TRAVANCORE AND COCHIN*, enlarged, updated and published as *THE BIRDS OF KERALA* soon ran out of print. A small but insistent demand for the book from birdwatchers and university zoology students had persisted thereafter and publication of a third edition, for which a good deal of additional matter had accumulated in the intervening years, was under active consideration. Meanwhile, the Forest Department of Kerala State had decided to support the reissue of the book by seeking an immediate supply of it as a commemoration volume for the forth-coming Golden Jubilee celebration of the Periyar Wildlife Sanctuary beginning in September 1984. Since there was insufficient time for a thorough revision and updating of the book with inclusion of all the new matter available, the publishers have felt impelled to bring out a straight reprint of the 1969 edition by the photo-offset process as an interim measure, pending the major revision for the contemplated third edition. It is hoped that the revised edition will soon follow at an early date."

Unfortunately, Dr Salim Ali passed away on 20 June, 1987 before his hope could be fulfilled.

After Dr Salim Ali's demise, encouraged by the quick sales of the 1984 reprint of the *BIRDS OF KERALA*, Oxford University Press suggested to the Kerala Forest Department that the Department could consider the publication of a revised and updated edition of the *BIRDS OF KERALA*. The response of the then CCF (Wildlife) was very encouraging and OUP, after consulting the Bombay Natural History Society, decided to entrust the work of revising the book to one of us (KKN). Eventually, however, OUP seemed to have lost interest in bringing out a revised edition of the book.

In this connection it may not be out of place to mention that in August 1976, KKN had sent Dr Salim Ali some notes on the birds of Kerala running to some 20 foolscap pages. These included a list of some birds which, according to the Vernay Survey Report published in the *Journal of the Bombay Natural History Society* (1930 to 1937, Vols 34-39), occurred in Kerala but had not been included in BOK, and also various observations

of KKN himself. Acknowledging these notes, Dr Salim Ali wrote, "I was very glad to get your letter of 3 August together with your helpful and constructive notes and suggestions for a revised second edition of the *BIRDS OF KERALA*. I shall be happy to use as much of this material as practicable if a second edition does ever come out! ...If a second edition does not come off I think it would perhaps be a good idea for you to edit these notes you have so painstakingly assembled and publish them in the *Journal* (of the BNHS)."

KKN never got round to editing these notes for publication. One of the reasons for putting off this task was that by 1980 he and a number of other bird watchers had recorded in Kerala various birds which had not found a place in Dr. Salim Ali's book. They had also gathered much new information on nesting, general behaviour etc. of some of the birds dealt with in *BOK*. Putting all this information together was not at all easy; and, as the prospect of bringing out an updated edition of *BOK* seemed to be very remote, the labour involved in organising the mass of miscellaneous information appeared to be quite fruitless.

However, early in 1990, C.Sashikumar wrote to KKN that he, C.Jayakumar, Jafer Palot and Dinesan Cheruvatt had formed an association for Nature Conservation and Nature Education named THANAL, and that one of their projects was the publication of a checklist of the birds of Kerala modelled on *A CHECKLIST OF BIRDS OF ANDHRA PRADESH* (1989) compiled by Siraj A.Taher and Asheesh Pittie. KKN, commenting on this, suggested that, as a number of birds not included in Dr Salim Ali's *BIRDS OF KERALA* had been recorded in Kerala since 1969, and some new light thrown on the breeding, general habits, voice etc. of the birds dealt with by Dr Salim Ali in *BOK*, it would be better to produce a book that could serve as an appendix to *BOK*. In it the birds recently recorded in Kerala could be treated in the same way as Dr Salim Ali has dealt with those included in *BOK*. Notes that would supplement the information provided in *BOK* (eg. recent breeding records) could also be added so that, in effect, we would be updating *BOK* to some extent. He also suggested that THANAL could try to contact and ask for the co-operation of all those birdwatchers who were likely to have useful information on Kerala birds.

The upshot was that THANAL printed an appeal for information on Kerala birds, along with three pro formas which would facilitate the communication of such information. Copies were posted in mid-April to

some 200 birdwatchers including some foreigners.

By the end of August 1990 only 41 persons had responded. Of these only 20 had filled the pro formas for the supply of information. 3 more pro formas were received subsequently.

The filled in pro formas were handed over to KKN by CSK on 8-9-'90. Much of the valuable pieces of information provided by these persons had already been published in the *Journal of the Bombay Natural History Society* or other journals, so that the quantum of really new information turned out to be quite meagre. However, a good deal of information was dug up from some journals (see Bibliography) and some birdwatchers went on communicating their later observations to the one or the other of us.

We had decided to call the book *A BOOK OF KERALA BIRDS* and to publish it in two parts: PartI covering only the 'new' birds, and Part II containing additional information on the birds already dealt with in BOK.

By December 1991 the first draft of Part I had been completed. One of us (RV) took on the tedious task of typing the manuscript and arranged to have it printed out by computer.

Meanwhile, KKN had gone to Trivandrum in January 1992 and met the Chairperson and some other office-bearers of WWF-India, Trivandrum, as well as the Director of the State Committee for Science, Technology and Environment, to discuss the problem of finding a publisher for the book and of obtaining the necessary funds. Both WWF-I, Trivandrum and the Director of the Science, Technology and Environment Committee were extremely helpful.

Ultimately, it was decided that THANAL will make a gift of the right to publish an edition of one thousand one hundred copies of Part I to the World Wide Fund for Nature (W.W.F.-India, State Committee, Trivandrum). We should thank the Chairperson and the members of the State Committee of WWF-I, Trivandrum, for their readiness to publish the first edition of the book at their own cost. Thanks are also due to Mr.C.Jeyakaran of Kodaikanal for his kindness in allowing us to use the unique photograph of the Peninsular Bay Owl.

We have great pleasure in thanking the following persons for advice, encouragement and assistance:

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Satheesan.Dr.S.M.,B.N.H.Society, Bombay-23.

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Unnikrishnan.P.N.,Conservator of Forests, Trivandrum-14.

We are deeply obliged to Dr.D.N.Mathew, University of Calicut, and V.Santharam, Research Scholar, now working on the ecology of woodpeckers at Peechi, Trichur Dt., for agreeing to serve on the Scrutiny Committee and for their prompt help in sorting out some doubtful new records of birds received by us.

We are also grateful to all those birdwatchers who responded to THANAL's appeal for information on birds (Please see Appendix - II).

Special thanks are due to Shri. BM Koya of BRB Offset Printers and Publishers, Kannur for having undertaken the challenging task of printing this book with remarkable fortitude.

K.K.NEELAKANTAN
C.SASHIKUMAR
R.VENUGOPALAN

NOTES ON THE TEXT

NOMENCLATURE

The English and scientific names are those used in the *HANDBOOK* (compact edition, 1983). Trinomials are based on the distribution of sub-species given in the 2nd edition of the *SYNOPSIS* (1982). One reason for adopting trinomials is that their use enabled us to use the serial numbers assigned to each race in the *SYNOPSIS* and the *HANDBOOK,* which greatly facilitated the storage and retrieval of information relating to each bird.

However, amateur birdwatchers would do well to use only the English (or common) names of the species they identify in the field, ignoring such epithets as 'Indian', 'Ceylon', 'Eastern', and so on, except in those cases where (as with *Hbk* Nos. 821 and 826, Goldenbacked Woodpeckers) it will lead to confusion. In written reports the scientific name of the bird should also be restricted to the specific name; if, however, the subspecific name is given the reason for doing so should be stated.

Malayalam Names : none of the birds included in Part I has a local name. In some cases names have been suggested by KKN and CSK; some of the names coined by P.K.Uthaman and used by him or others in published articles have been adopted; in other cases no Malayalam names have been given.

STYLE AND FORMAT :

Uniformity of style and of format could not be ensured for various reasons. For that, we can only offer our apologies.

BASIS FOR THE INCLUSION OF 'NEW' BIRDS :

a) Of the 95 taxa included in Part I of *A BOOK OF KERALA BIRDS* , 20 are based on specimens (including captive and dead birds seen or reliably identified.). Their *HANDBOOK* Nos. are:

17, 23, 32, 60, 63, 179, 355, 407, 414, 417, 471-3, 474, 610a, 617, 781, 925(?), 1543, 1878, 1882 and 1886

b) Based on statements in the *Vernay Survey Report* (see Bibliography) or the distribution given in *SYNOPSIS* 2 or the *HANDBOOK* or the *BIRDS OF SOUTHERN INDIA* are (with the source given in abbreviated form within

brackets after each *Hbk* No.):

25(*SYN.*), 70(*VSR.*), 101(*VSR&BOK*), 275(*SYN.*), 278(*VSR.*), 451(*SYN.*), 467(*Bs. Sn. India*), 531(*VSR.*), 546(*VSR.*), 581(*VSR.*), 700(*VSR., Hbk.*) and 1877(*SYN.*) - Total 12.

c) Based on more than one sight record by more than one observer are:
26, 27, 65, 71, 72, 73, 90, 93, 97, 115, 350, 371, 380, 389, 391, 400, 413, 420, 430, 432, 434, 443, 463, 470, 476(?), 480, 767, 796, 883, 912, 921, 922, 930, 933, 1231, 1307, 1578, 1637, 1660, 1672, 1710, 1830, and 1964. - Total 43.

d) Based on a single sight record by a single observer are:
3, 55, 82, 89, 172a, 208, 250, 313, 423, 426, 437, 450, 469, 663, 913, 1089a, 1565, 1570, 1733 and 1965. - Total 20.

The occurrence of all but the 20 birds of the first section requires confirmation.

SOURCE REFERENCES.

The source of information gleaned from books and journals is given in the text itself. In all instances where no particular source is mentioned, it may be assumed that the information was communicated personally to one of the Editors.

NOTES ON THE IDENTIFICATION OF UNFAMILIAR BIRDS AND ON HOW TO REPORT THE SIGHTING OF A BIRD NOT RECORDED EARLIER IN KERALA.

While scrutinising the various reports of 'new' birds sent to us or even reported in journals, we realised that very few birdwatchers seemed to know how to describe a bird or what to include in their reports of a hitherto un-recorded species or subspecies. We are, therefore, adding some brief notes which we hope will be of help to beginners who come across unfamiliar birds.

All good guides (e.g. *A FIELD GUIDE TO THE BIRDS OF BRITAIN AND EUROPE* by Roger Peterson et. al. 1956, or later edition; *THE BIRDS OF BRITAIN AND EUROPE* by Heinzel, Fitter & Parslow 1977 or later edition; *A FIELD GUIDE TO THE BIRDS OF SOUTH-EAST ASIA* by Ben King et. al. 1978 or later edition - all three published by Collins, London; *A POCKET GUIDE TO BIRDS* by Alan Cruickshank 1960 or later edition, Wahsington Square Press Inc., New York.), guides to birdwatching (e.g.

BIRDWATCHING FOR BEGINNERS by Bruce Campbell, 1952 or later edition, Penguin Books, London and various other books) give excellent tips on what to do when you meet with an unfamiliar bird, what to look for, how and what to record etc.

To record details of a bird's plumage and other external features, it is essential to know the names of different areas of a bird's body and the parts of its bill, legs, wings etc. Most bird books including SA's *BIRDS OF KERALA* and the *HANDBOOK* give diagrams of a bird's body and indicate the names used in describing its various parts. However, we have added a diagram of the topography of a bird's body, which, we hope, will make it easier to specify a little more precisely the different parts of a bird's body. *

The earnest birdwatcher must always carry with him a pocket notebook, pencils or ball-point pens, and develop the habit of jotting down notes in the field while watching birds. Recording a bird's shape, the shapes and proportions of its bill, neck, wings, tail and legs etc., striking patches of colour in its plumage, 'field marks' such as supercilia, eye-streaks, pale or dark streaks on the crown, crests, 'ears', bars or streaks on upper and underparts - all this will be much easier, more timesaving and more precise if you can sketch birds in the field and indicate its various features on the sketch you make *on the spot* than writing down elaborate notes on these things. If you make your sketches and write your notes after going home, your memory is sure to let you down or play you false.

An unfamiliar bird should be obsreved closely, and from different angles, for as long as the bird will permit. In addition to making one or more sketches of the bird and indicating its colours etc., you should try to compare it with some familiar bird and make notes such as 'slightly larger than Common Myna' or 'as big as a Crow' etc.; you should also note down, on the spot, how it moves, flies, feeds, calls, whether it is solitary or with others of its own kind or of other species, whether it has any speical 'mannerisms' such a wing-flicking, flirting or shivering its tail, 'bobbing' etc. An experienced birdwatcher should be able to guess the family (e.g. kingfisher, woodpecker, flycatcher, swallow, swift, sandpiper, kite, falcon and so on) to which the unfamiliar bird belongs. In short, the more details

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*See Topography of a Bird and other sketches. The note on Topography in the *NEW DICTIONARY OF BIRDS* (Ed. A.L.Thomson, 1964) says, "The boundaries of these areas are mostly incapable of close defenition."

you are able to note down about the bird, the easier it will be for you to identify the bird by referring to *BOK*, the *HANDBOOK* etc.

A relatively inexpensive paper-back that explains all this very lucidly and also contains useful tips on what to do if you come across a dead bird, is the rather misleadingly titled *BIRD COUNT* by Humphrey M.Dobinson (1976, Penguin Books, London). If you come across a dead bird (or a captive bird that will allow itself to be handled), you should record its measurements (length of the bird from the tip of its bill to the tip of its tail, the length of its bill, tarsus, tail and wings. How to measure these is explained briefly in the glossary, on page xxxii of the Compact editon of the *HANDBOOK* (1983) and in great detail in Ben King et. al's *FIELD GUIDE TO THE BIRDS OF SOUTH-EAST ASIA* (1975). pages 23-24.

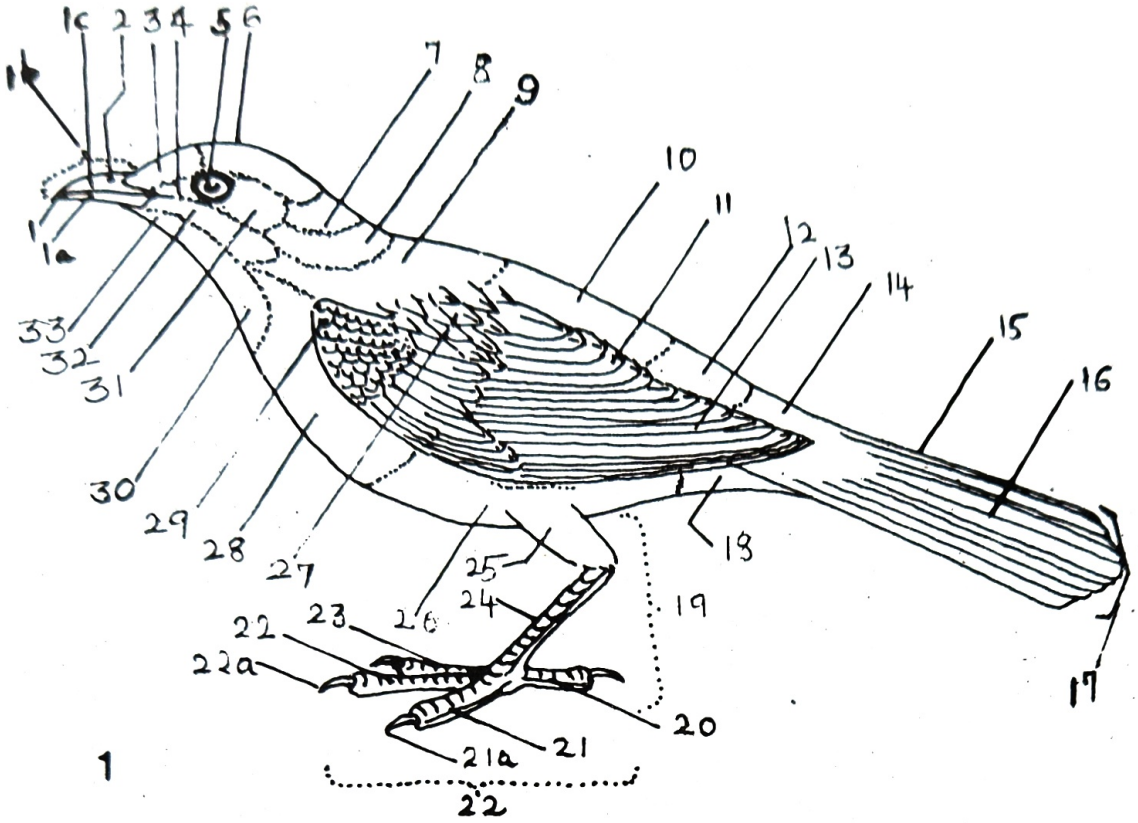


Fig. 1.TOPOGRAPHY OF A BIRD

1. Bill
   1a. Lower mandible.
   1b. Culmen.
   1c. Upper mandible.
2. Nostril.
3. Forehead.
4. Lore.
5. Eye.
6. Crown.
7. Nape.
8. Hindneck.
9. Mantle.
10. Back.
11. Secondaries.
12. Rump.
13. Primaries. (see Fig. 2 for more details of the wing.)
14. Upper tail-coverts.
15. Side feathers of tail.
16. Middle feathers of tail.
17. Tail.
18. Under tail-coverts.
19. Leg.
20. Hind toe.
21. Outer toe.
    21a Claw.
22 Middle toe.
    22a. Claw.
23. Inner toe.
24. Tarsus.
25. Tibia.
26. Abdomen or Belly.
27. Scapulars.
28. Breast.
29. Marginal wing-coverts.
30. Throat.
31. Ear-coverts.
32. Malar region.
33. Chin.

The flanks (sides of the abdomen) are concealed by the folded wing.

Note: The boundaries of the different areas of the upper and under parts are only approximate. See footnote on page. xxiii

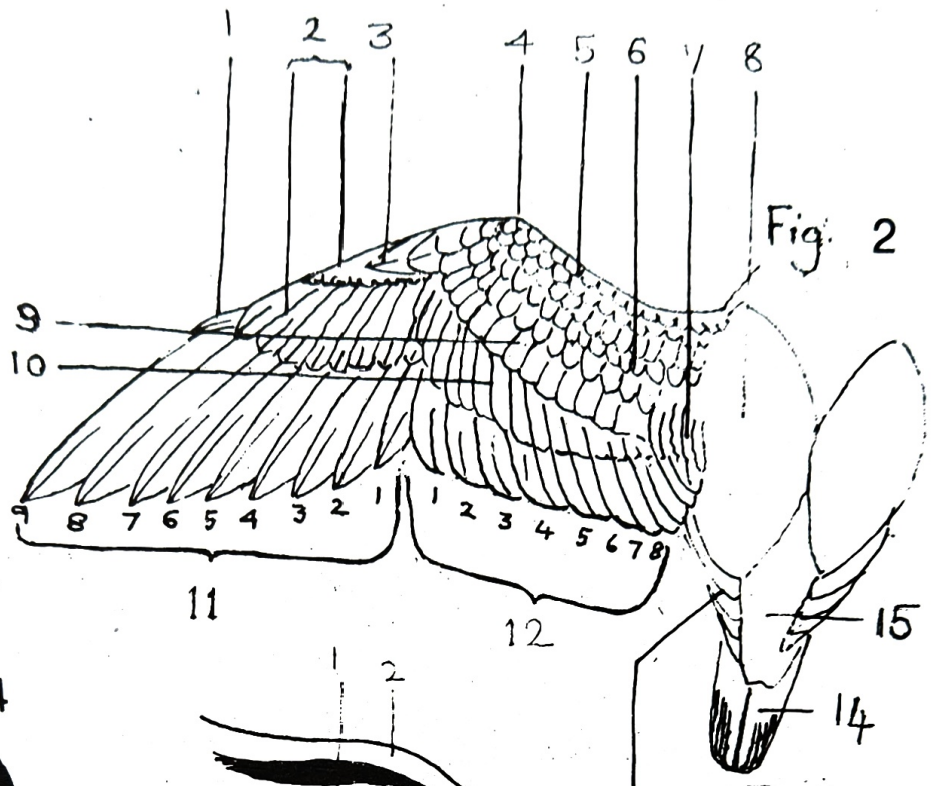
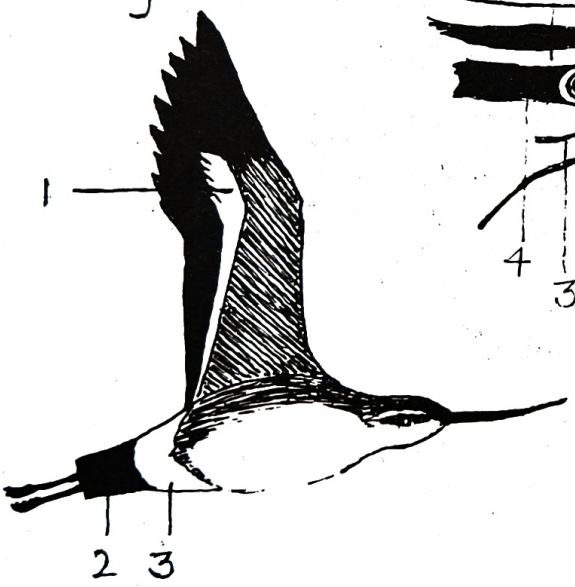


Fig. 2

Fig 4



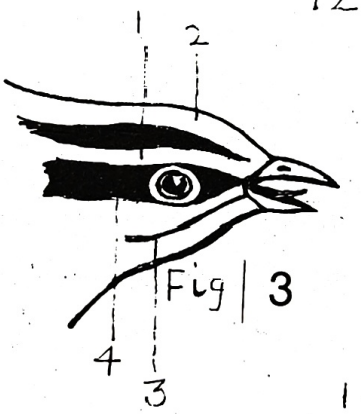
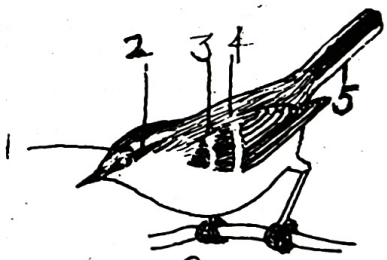


Fig | 3

Fig | 7



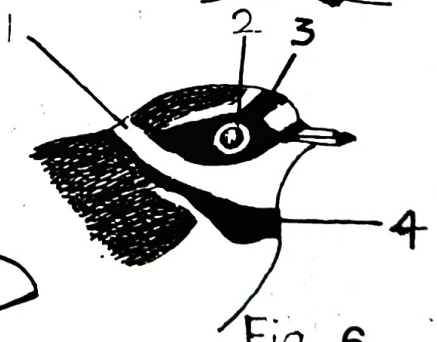


Fig 6

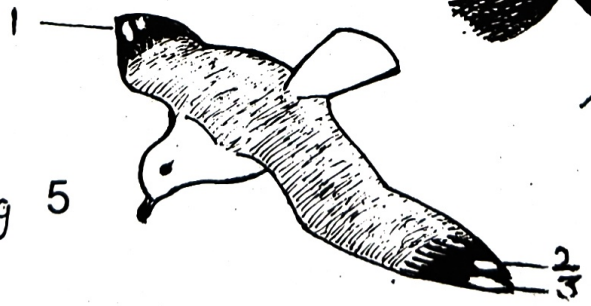


Fig 5

Fig. 2. PARTS OF A BIRD'S WING.

1. Rudimentary outermost primary.
2. Primary coverts-greater.
   -median
3. Alula.
4. Carpal joint
5. Marginal coverts.
6. Lesser coverts.
7. Axillaries.
8. Scapulars.
9. Median coverts.
10. Greater coverts.
11. Primaries.
12. Secondaries.
13. Tertials.
14. Tail.
15. Upper tail-coverts.

Fig. 3. HEAD MARKINGS.(Imaginary bird.)

1. Supercilium.
2. Coronal streak
3. Malar stripe.
4. Eye stripe.

Fig. 4. WING-BAR AND TAIL-BAND. (Blacktailed Godwit.)

1. White wing-bar.
2. Black terminal band on tail.
3. Rump.

Fig.5. WING MIRRORS. (Gull.)

1, 2 & 3. White 'mirrors' at wing-tip.

Fig. 6. HEAD AND BREAST. (Little Ringed Plover.)

1. White hind collar.
2. Eye-ring.
3. Frontal band.
4. Breast-band (part of black collar.)

Fig. 7.SUPERCILIUM AND WING-BARS. (Leaf Warbler.)

1. Supercilium.
2. Eye-streak.

3 & 4. Wing-bars.

5. Outer rectrices.

GLOSSARY

altricial : (nidiculous) - helpless when hatched and incapable of locomotion.

alula : (bastard wing) - a group of 4 or 5 small, stiff feathers attached to the 'thumb' of the wing-bones; helps flying birds, particularly birds of prey, to maintain stability in slow flight (Fig.2:3).

axillaries : a small tuft of feathers in the axilla (arm-pit); those of the Grey Plover, for instance, are a good field-mark.

band : (bar) - a term applied to the dark or pale bands on either side of the wing or on the tail or other parts of the body.

bare parts : (soft parts) - unfeathered parts of the body such as the bill, cere, eyes, toes, claws, the tarsus and other areas of bare skin (e.g. wattles, lobes etc.)

bill length : the straight distance between the base of the skull and the tip of the bill.

breast band : a bar or band across the breast that differs in colour from the surrounding areas (Fig. 6:3).

buff : a light yellow.

carpal joint : the 'wrist joint' (the bend of the wing) (Fig. 2:4).

carpal patch : a patch on the underwing near the carpal joint (q.v) differing in colour from the surrounding areas.

casque : an enlargement on the culmen in front of the head (as in most hornbills).

cere : the fleshy covering at the base of the upper mandible (as in pigeons, most diurnal birds of prey etc.).

chāli : a Malayalam word for a shallow, marshy wetland.

cheek : a rather vague term applied to the side of the face below the eyes.

collar : a band or patch of distinctive colour, at least partly encircling the neck (Fig.6:1,4).

coronal stripe : a stripe along the middle of the crown, as in snipes, pittas, and the Whimbrel (Fig.3:2).

coverts : rows of overlapping feathers covering certain features such as the ear, the rectrices and remiges above and below (Fig.2:2,3,4,5,6,9 and 10).

crespuscular : active at dawn and dusk.

crest : a tuft of feathers sticking out on the head of a bird (as in Redwhiskered Bulbul, the bazas, the Crested Hawk-Eagle etc.).

culmen : the ridge of the upper mandible from forehead to tip (Fig. 1:1b).

eye - stripe : a dark band or streak from the bill through the eye (as in shrikes, some waders etc.) (Fig. 3:4).

ferruginous : (rufous) - rusty brown tinged with orange.

flank : side of the belly (normally hidden under the folded wing.).

fledgling : a young bird which has acquired its first true feathers.

flight feathers : the primaries, secondaries and the tail feathers together (Fig.2:11, 12 and 14).

frontal band : a band on the forehead (Fig.6:3).

frontal shield : a hard, naked plate extending from the base of the bill over the forehead (as in coot, the gallinules, jacanas etc.).

fulvous : (tawny) - a dull brownish yellow, or brownish orange.

gape : (rictus) - the joint of the upper and lower mandibles.

gorget : a line from the gape encircling the throat (as in the Large Pratincole).

gular skin : a bare patch of skin on the throat (as in cormorants; some are 'pouches', expandable like those of frigate birds and pelicans).

hackles : elongated narrow feathers of the hind neck (as in the jungle fowl).

hepatic : liver-coloured; a greyish reddish-brown.

Holartic : a geographical term for the area comprising most of North Asia, North America and part of North Africa.

hood : a term sometimes applied to a bird's head when the head and neck are wholly black (as in the Blackheaded Oriole, the Blackheaded Cuckoo-Shrike etc.).

immature : refers to all stages in the growth of a chick till it assumes adult plumage.

iris : the part of the eye surrounding the pupil; plural irides.

juvenile : a young bird still wearing its first plumage of true feathers.

kāyal : Malayalam for backwaters.

kulam : Malayalam for tank or pond.

lobe : a fold of skin extending from the sides of the toe (as in grebes).

lore : the area between the base of the upper mandible and the eye (Fig. 1:4).

malar : area on the side of the face immediately behind and below the base of the lower mandible (Fig.1:32).

mantle : a term for the feathers of the upper back, the scapulars and the wing-coverts taken together.

mesial stripe : a streak or stripe running down the middle of the chin and throat (as in the Shikra, the Crested Goshawk etc.).

mirror : refers to the white patches in the black tips of the wings (as in some gulls).

moustache : a large black patch on the cheek (as in the Peregrine).

moustachial streak : a streak running back and down from the base of the bill to the side of the neck (Fig. 3:3).

nuchal : of the nape; crests like those of the Nigh Heron, Little egret in breeding plumage etc. are nuchal crests.

occipital : of the occiput or the back of the head (the crest of the Crested Hawk-Eagle is an occipital crest).

ochraceous : dark brownish-yellow.

orbital ring : a conspicuous ring round the eye (as in the Little Ringed Plover) (Fig.6:2).

pectoral band : (pectoral = of the breast); breast-band (Fig.6:4).

pelagic : of the ocean; oceanic.

precocial : capable of leaving the nest and moving about soon after hatching (like the hatchlinges of the Ringed Plover, lapwings etc.).

primaries : the long feathers of the wing attached to the bones of the hand or 'manus' (Fig.2:11; note that these are numbered from the carpal joint outwards and that the secondaries are numbered in the opposite direction).

raptor : a bird of prey.

remiges : the primaries and secondaries together. Sigular: remex (Fig.2:11 and 12 combined).

rump : the lowest part of the back just above the upper tail-coverts (Fig.1:12.).

secondaries : the long feathers of the wing attached to the forearm or ulna (Fig.2:12).

scapulars : the feathers covering the shoulder and the base of the wing on both sides of the back (Fig.2:8).

shaft : (rachis) - the central spine of a feather to which the vanes or webs are attached.

shaft-streak : a streak formed when the colour of the shaft is different from that of the webs or vanes of a feather.

speculum : a distinctive patch of one or more colours on the secondaries, particularly of ducks.

squamated : with scale-like markings.

supercilium : a stripe above the eye contrasting in colour with that of the adjacent areas; also called eyebrow (Fig.7:1).

tarsus : the lower part of the leg to which the toes are attached (Fig.1:24). The length of the tarsus is the straight distance between the upper

end of the tarsus (the 'knob' at the 'knee-joint') and the lower end of the lowest undivided scale or scute at the joint of the tarsus and the middle toe measured with a pair of dividers and a scale, and given in millimetres. (See the *HANDBOOK* or Ben King's *FIELD GUIDE TO THE BIRDS OF SOUTH-EAST ASIA).*

terrestrial : ground-living (e.g. quails, partridges).

tertial : (tertiary) - applies to the secondaries borne on the humerus and not on the ulna; these are the secondaries closest to the bird's body (Fig.2:13).

tibia : the upper part of the visible portion of a bird's leg. (The joint of the tibia with the tarsus, though often called the 'knee-joint', corresponds to the ankle-joint in the human foot. Fig.1:25).

underparts : the ventral side of a bird's body from throat to under tail-coverts.

upperparts : the dorsal side of the body including the back and the upper surfaces of the wings and tail.

vagrant : wanderer or wandering; rare and of random occurrence.

vane : (web) - the row of barbs growing on either side of the feather-shaft.

vayal : Malayalam term usually applied to paddy fields, but in Wynad to swamps in the forest.

vent : loosely applied, it refers to the under tail-coverts; strictly, the area around the 'cloaca' or the anal orifice.

vermiculation : irregular wavy lines on the plumage (also called 'pencilling').

vinous : wine-coloured, a sort of dark red.

wattle : a piece of bare skin growing on some part of the head or neck (as in the Hill Myna, Redwattled Lapwing etc.).

web : when applied to the toes of a bird, the skin connecting the toes (as in ducks, pelicans, cormorants etc.).

wing bar : a line of contrasting colour across a bird's wing made by markings on the wing-coverts; or a bar of contrasting colour formed when the bases of remiges are white (Fig.4:1, 7:3 and 4).

wing length : the straight distance between the bend of the wing and the tip of the longest primary.

wing lining : a comprehensive term for the under wing-coverts.

wing-span : the straight distance between the tip of one wing and that of the other when the wings are fully spread.

wing spot : an oval or circular patch (generally white) on the wing (as in the Common Myna, the Whitebreasted Kingfisher etc.).

zagodactyl : a foot in which two toes point forwards and two backwards (as in woodpeckers, cuckoos, parrots etc.).

LIST OF COLOUR ILLUSTRATIONS

Plate		
I	1	BLACK IBIS *Pseudibis papillosa papillosa*
	2	GLOSSY IBIS *Plegadis falcinellus*
	3	BLACK STORK *Ciconia nigra*
	4	WHITE STORK *Ciconia ciconia*
	5	PAINTED STORK *Mycteria leucocephala*
	6	ORIENTAL PRATINCOLE *Glareola pratincola maldivarum*
II	1	PINTAIL *Anas acuta*, male
	2	SPOTBILL DUCK *Anas poecilorhyncha poecilorhyncha*, male
	3	GADWALL *Anas strepera strepera*, male
	4	RUDDY SHELDUCK *Tardona ferruginea*, male
	5	BARHEADED GOOSE *Anser indicus*
	6	RIVER TERN *Sterna aurantia*
	7	SANDWICH TERN *Sterna sandvicensis*
III	1	AVOCET *Recurvirostra avocetta*
	2	CRAB PLOVER *Dromas ardeola*
	3	BLACKWINGED STILT *Himantopus himantopus himantopus*
	4	LEAST FRIGATE BIRD *Fregata ariel iredalei*, male and female
	5	BARTAILED GODWIT *Limosa lapponica*
	6	BLACKTAILED GODWIT *Limosa limosa limosa*
	7	INDIAN LITTLE RINGED PLOVER *Charadrius dubius jerdoni*
	8	SPOONBILLED SANDPIPER *Eurynorhynchus pygmaeus*
IV	1	EASTERN BLACK REDSTART *Phoenicurus ochruros rufiventris*, male
	2	RUFOUSTAILED FINCH-LARK *Ammomanes phoenicurus testaceus*
	3	RUFOUSBELLIED BUSH ROBIN *Erithacus hyperythrus*, male
	4	YELLOW-EYED BABBLER *Chrysomma sinense sinense*
	5	GREEN MUNIA *Estrilada formosa*
	6	RED MUNIA *Estrilda amandava amandava*, male breeding
	7	CHESTNUTBELLIED NUTHATCH *Sitta castanea castanea*, male

17 REDBILLED TROPIC BIRD
(SHORT-TAILED TROPIC BIRD)

Phaethon aethereus indicus Hume.

INTRODUCTION : Omkar.G. Krishnan reported (*JBNHS* **87:** 449) that there was a stuffed specimen of an immature bird of this species in the Zoology Department of the S.N.College, Quilon. It had been caught in a fishing net off Neendakara, now a major fishing harbour.

REFERENCES : *Hbk* **1**:22; *Pic.G*:5(2); *FG B SEA* No.9, p.35.

DESCRIPTION : Size Blackheaded Gull; length 40 cm.(16 in.) + tail ribbons 30 cm. (12 in.)

Adult : mostly white tern-like sea bird with red bill, wedge-shaped white tail with very long, pointed white tail-streamers; a black crescent in front of each eye and a narrow black wing-bar; fine black bars on the upper part of the body; wingtips black. Sexes alike. Legs and feet yellow or yellowish-white; iris dark brown. Immature: bill yellow; a blackish cap; no tail-streamers.

HABITS : An oceanic bird, often found flying close to ships. Flight tern-like; often glides. Plunges into the sea from a height of 30-40 metres to capture prey which consists mostly of fish and squids. EHA (E.H. Aitken) described its voice as an "incessant screaming while circling around ships"; W.W.A.Philips as a "loud, monosyllabic, rather finch-like" note.

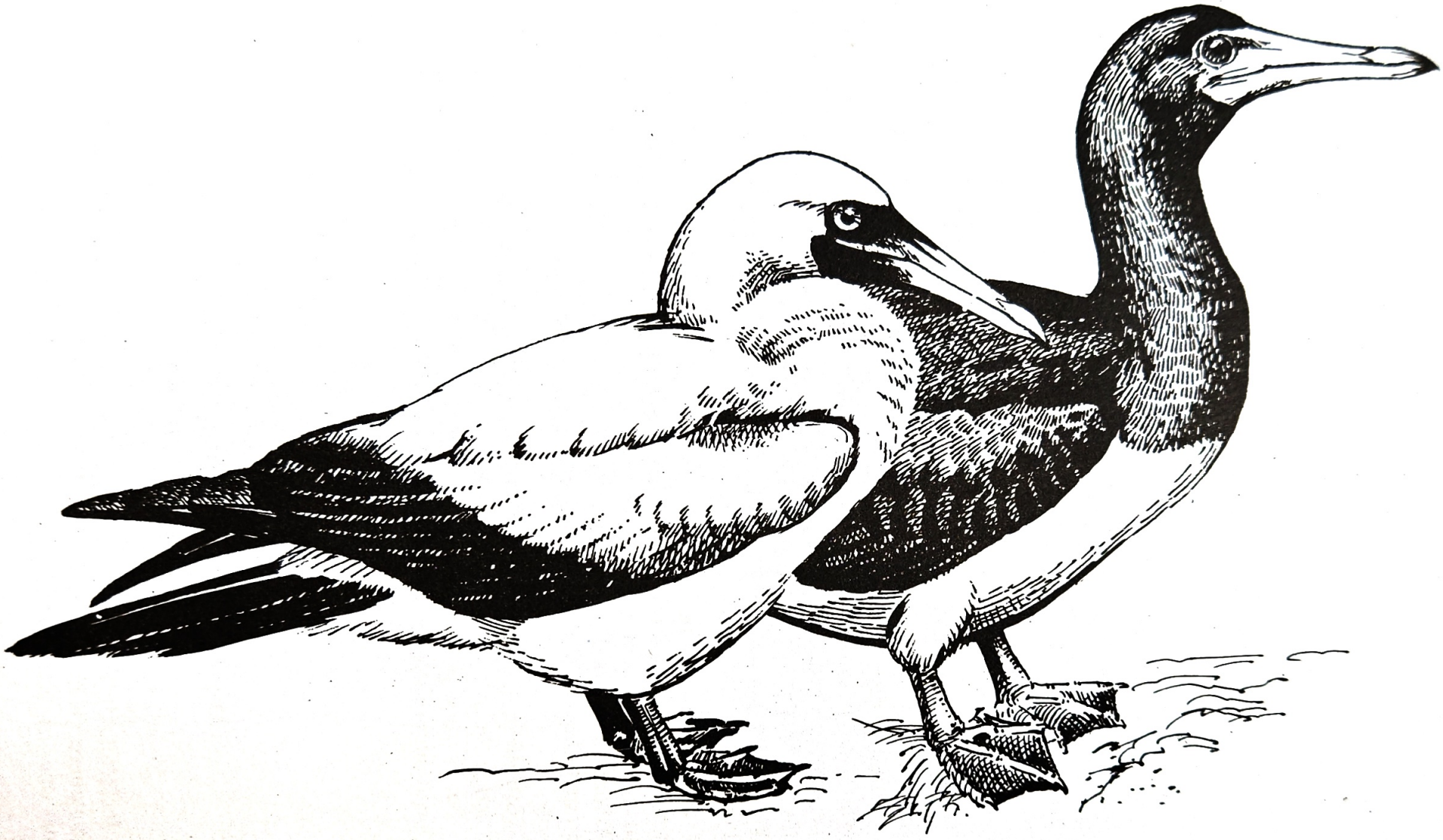
Breeds in the Persian Gulf in March-April, laying a single egg under a ledge of rock or in a crevice.

For a very good account of the Tropic Birds occurring in the Indian Ocean and adjacent seas, see Gibson-Hill, C.A (*JBNHS* **49**:67-80.)

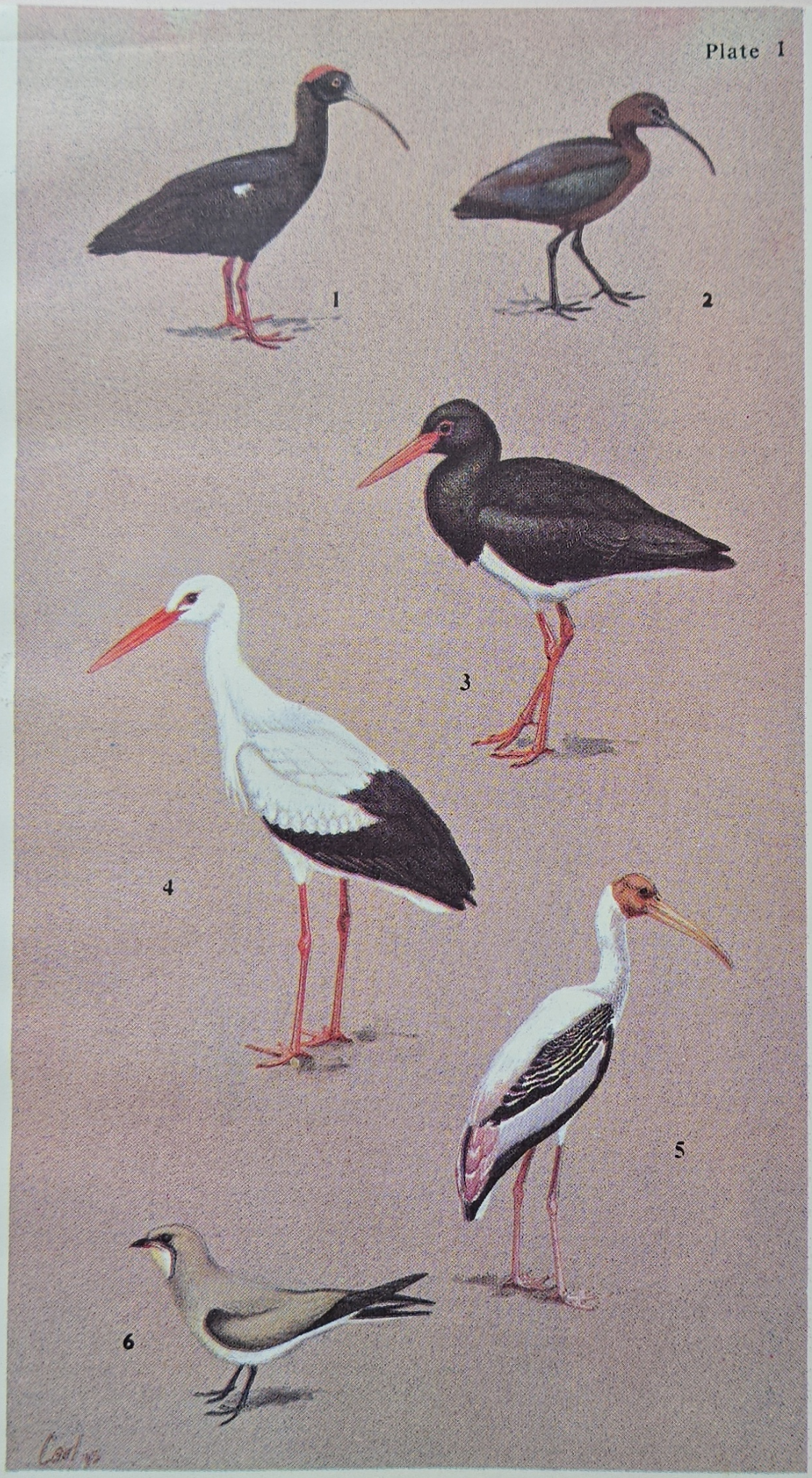
23 MASKED BOOBY
(WHITE BOOBY/BLUEFACED BOOBY)

Sula dactylatra melanops Heuglin.

INTRODUCTION : A young female was obtained by H.R.Baker at Cannanore (Kannur) on 19 July 1911 (*JBNHS*, **21**:272). L.Namassivayan saw one in Kadalundi Estuary (c.11° 05'N x 75° 51' E., c.20 Km



Masked Booby, Brown Booby



1. Black Ibis 2. Glossy Ibis 3. Black Stork 4. White Stork 5. Painted Stork 6. Oriental Pratincole

S of Calicut) on 30-7-1987. Deepakumar N.Kurup reported the capture of one at Chaliyam (near Beypore, Calicut Dist.) on 14-8-1988, and of another at the Kadalundi Estuary sometime in the same year (*JBNHS* **87**:449). C.P. Sethumadhavan and PON reported that an immature bird was captured at Kolazhy paddy fields near Punnayurkulam, Trichur Dt. in the first week of July 1992. It was later taken to the Trichur Zoo.

REFERENCES : *Hbk* **1**:32; *Pic.G.*:5(3); *Bs.of C.*:365.

DESCRIPTION : Size Barheaded Goose +; length 80cm. (32 in.). Sexes alike. Sea bird. Body stout and cigar-shaped; neck of moderate length; wings long and pointed; tail rather long and wedge-shaped. Bill stout, conical, pointed and slightly downcurved at the tip, but not hooked. Legs short and stout; feet large and fully webbed.

Adult : mainly white above and below; wing quills, greater wing-coverts and tail feathers chocolate-brown. Bill blue-grey, greenish-yellow, yellow, or red; naked skin of face and throat (the "mask") blue-black; feet yellow, orange, greenish-blue, slaty blue or slaty grey. Iris yellow. Immature : head and neck dark brown; upperparts greyish-brown.

The Masked Booby's tail feathers are dark brown and its feet are never red.

HABITS : Avoiding the muddy littoral, these birds fish in the clear waters of the deep sea, plunging headlong into the water from a height of 8 to 17 metres to capture squids and flying fish. They breed on oceanic islands.

25 BROWN BOOBY
(COMMON BOOBY/BROWN GANNET)

Sula leucogaster plotus (Forster)

INTRODUCTION : According to *SYNOP.*2 this booby has been recorded off "the Malabar coast..... in the NE Monsoon".

REFERENCES : *Hbk* **1**:34; *Pic.G.*:5 (6); *Bs.of C.*:364.

DESCRIPTION : Similar to the Masked Booby in shape and habits. Slightly smaller (length 76 cm. or 30 in.). Dark chocolate-brown above. Primaries blackish. Below white but for the neck and upper breast which are chocolate-brown, and black margins of the wings. Sexes alike. Immature: dusky brown, difficult to distinguish from the young of other species.

The Brown Booby's dark chocolate-brown plumage and white belly, wing lining and under tail-coverts distinguish it from the other boobies. "The pale beak and face, contrasting with the surrounding dark brown feathering, helps in its identification even at a distance" (G.M.Henry)

HABITS : Same as Masked Booby's. Breeds on Christmas Island and other tropical Islands.

26 LARGE CORMORANT

Phalacrocorax carbo sinensis (Shaw)

INTRODUCTION : I.R.Grimwood and Brocklehurst. M.J.C saw flocks of this species in the Parambikkulam reservoir on 2-12-1982 (*JBNHS* **81**:697). On 29-9-1984 in the same reservoir at Thoonakkadavu. Suresh Elamon saw a cormorant " with a white patch on each thigh, and a white throat; the gular pouch was not noticeably yellowish." On 26-2-1989 Zulfikar Marikar and companions saw a flock of 47 on partially submerged trees at Thoonakkadavu. On 27 and 28 July 1989 D.N.Kurup saw one in the Peppara reservoir 50 km south of Trivandrum. It was roosting with Darters and Little Cormorants. On 24-11-1990 V.Santharam saw more than 15 in the Periyar WL Sanctuary. More than half of the flock were immature birds with varying amounts of white on under parts, ranging from all-white to white speckling on breast and belly. All had a yellow-orange patch of skin on throat. On 22-12-'90 Svend E.Lauritzen saw a few near Edappalayam (Periyar WL Sanctuary.)

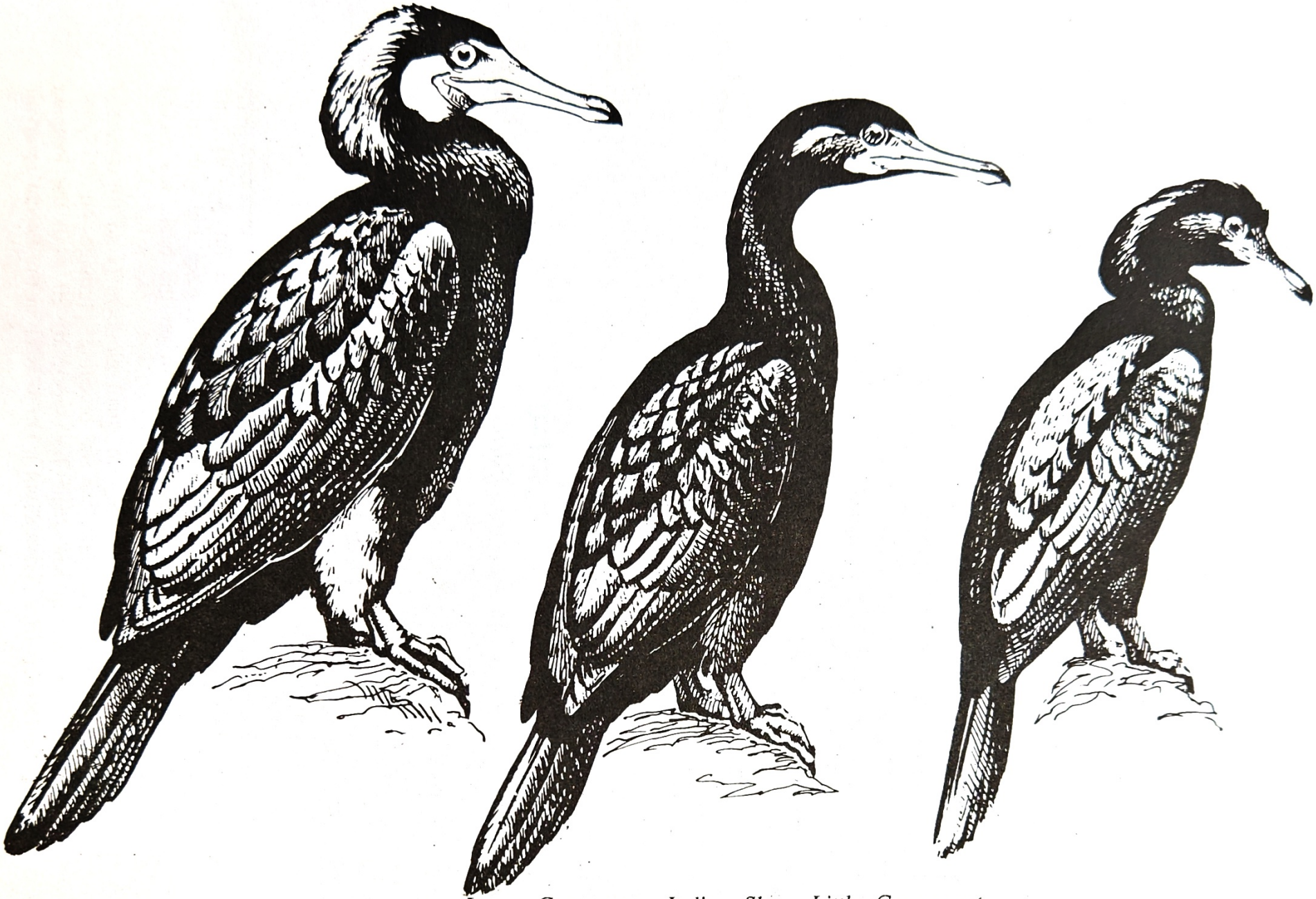
On 9-7-1991 B.Sreekumar saw some 'very large' cormorants at Kumarakom which he believes were of this species.

"Large Cormorant is a recent colonist, never seen by MCAJ up to 1972, nor between 1977 - 82 in surveys reported by Nair. It is now the most common member of the family on the lake, regularly present in increasing numbers - up to 90 birds. It has been breeding on the lake in the Core Zone since at least 1989 in a colony that now numbers a score of nests." (*Birds of Periyar* - AR and MCAJ) Jafer Palot counted 196 birds on 9th May 1992.

REFERENCES : *Hbk* **1**:37; *Pic.G.*:4 (1); *Bs.of C*:359

MALAYALAM NAME : വലിയ നീർക്കാക്ക; *Valiya Neerkakka*

DESCRIPTION : On cormorants in general, see *BOK* p.19 (General habits). Large Cormorant is larger than Shag. In breeding plumage



Large Cormorant, Indian Shag, Little Cormorant

easily recognised by the large oval white patch on either side of the belly. Cheeks and throat white in all seasons. The gular pouch (at the base of the lower mandible) is bright yellow (often with black patches), less conspicuous in non-breeding plumage. (Note that the Shag, too, has a yellow gular pouch.)

In breeding plumage, large size, white sides of face and white oval thigh patches are good clues, but in non-breeding plumage field identification is less easy as the chief clue is size. Immature : head and neck dark brown; upper parts greyish brown (*Hbk*).

HABITS : Similar to Little Cormorant. Except at breeding colonies, usually seen in small numbers.

BREEDING : Nests in mixed colonies of storks, herons, egrets etc. (as at Vedanthangal, Tamilnadu.)

At Periyar, the breeding season is from Dec. to May. 51 nests were observed in 1991 - '92 season and 50 in 1992 - '93 by the end of Feb. '93. Nests placed on dead trees in the lake. (Jafer Palot)

AR and MCAJ point out that the breeding site of Oriental Darter *Anhinga rufa,* established in 1969, with a dozen nests, has been taken over by the Large Cormorants. (*Birds of Periyar*)

27 SHAG

Phalacrocorax fuscicollis Stephens

INTRODUCTION : SA included a note on this bird in *BOK* saying, "It possibly also occurs in Kerala, as it does in Ceylon and elsewhere in Peninsular India." V.Santharam saw an adult with what seemed to be a juvenile in the Periyar WL Sanctuary in the first week of May 1987. Between 12-10-'89 and 27-10-'89 he found it common and more numerous than Little Cormorant. Some were juveniles. But on 24-11-'90 he saw none in the same area.

B.Sreekumar saw some cormorants larger than Little Cormorant, with yellow gular skins and white chins, at Kumarakom on 9-7-'91, and believes he saw one sitting in a nest. As he did not see any with white ear-tufts and failed to note the scaly pattern on the back, his record needs confirmation.

CSK has been seeing the Shag in small numbers (1 to 8) at Kattampalli since 1981. He saw one in breeding plumage on 30-7-'89. Deepakumar N. Kurup saw (date not specified) 30 + in the Peppara Reservoir (50 km from Trivandrum.). On 1-3-'91 in the Peechi reservoir

V.Santharam and PON saw a flock of some 100 Shags (*NLB* May-June 1991 p.8). On 25-12-1992, C.K.Sujithkumar, C.B.Anilkumar and K.Sangeeth saw 26 Shags on a dead tree in the Thoonakkadavu reservoir, Parambikkulam WL Sanctuary.

On the basis of the above records the Shag may be admitted to the Kerala list.

REFERENCES : *Hbk* **1**:39; *BOK*:20; *Pic.G*:4(2); *Bs.of C*:360; *BIB*:1.

MALAYALAM NAME : കിന്നരി നീർക്കാക്ക; *Kinnari Neerkaka.*

DESCRIPTION : Size : Duck +; length c.63 cm (25 in.) Intermediate in size between Large and Little Cormorants.

Adult : glossy greenish-black above; mantle, scapulars and wing coverts bronze-brown, each feather margined with black, producing a scale-like pattern. Below, glossy jet black. Breeding birds have a pure white tuft of feathers on each side of the head behind the ear-coverts with a few white specks on the head. Sexes alike. Young birds : dull brown above; more or less white below. Iris green or blue-green; bill dark brown, base of the lower mandible reddish-horny; gular skin yellow; naked skin of face blackish-purple in the breeding season, yellowish at other times. Legs and feet black.

HABITAT & HABITS : Occurs in reservoirs, tidal estuaries and back-waters. Gregarious. Expert swimmer and diver. Mixes freely with the Little Cormorant. Often, as Darter and Little Cormorant do, sits up-right on rocks, sandbanks and trees with wings and tail spread open. Breeding not recorded in Kerala. Season, according to the *Hbk,* November to February in the south. Nesting, similar to Little Cormorant's.

32 LEAST FRIGATE BIRD.

Fregata ariel iredalei Mathews

Plate III, 4

INTRODUCTION : There are two records of this bird from Kerala. Around 1904 a young bird was secured near Trivandrum according to Ferguson (*JBNHS* **16**:13). S.Faizi found an old mounted specimen of a juvenile in the Zoology Department museum, S.N.College, Quilon. It had been taken during the SW Monsoon some years ago. It was

identified by Dr. Dillon Ripley as a *Fregata ariel* (*JBNHS* **82**:191)

REFERENCES : *Hbk* **1**:49; *Pic.G*:3(4); *Bs.of C*:367; *FG B SEA*: 49.

DESCRIPTION : Frigate birds are large, slim sea birds with very long narrow, pointed wings and long, deeply-forked tails which are often folded and look thin and pointed. The hook-tipped bill is longer than the head, with a downward curve at the tip. The legs are very short, used only for perching on trees.

The male is smaller than the female. It is black all over but for an oval white patch on the flanks. The female has a black throat and white breast, the white extending to the sides of the black belly.

HABITS : Usually solitary or in pairs except while breeding. Seldom seen far from the coast. Magnificent fliers,they soar, or sail on motionless wings high up over the sea. Called Man-O'-War Birds because they are given to robbing boobies, gulls and terns of the prey they have just caught. Also rob the nests of terns, gulls and other colonial nesters; often pick up fish and squids from the sea without ever alighting on the surface. Uncommon straggler to the Kerala coast. Nearest breeding place believed to be the Maldive Islands. Nests in colonies, generally in trees and bushes. Courting males blow up their throat pouches into huge crimson balloons.

[55 LITTLE BITTERN

Ixobrychus minutus (Linnaeus)

INTRODUCTION : On 11-1-1975 KKN had a glimpse, in the Veli Lake (Trivandrum) of two small, very pale-brown bitterns with black flight feathers, which seemed to be of this species. They had been hiding in a thick screwpine clump.

The Little Bittern is a very small bird (length 36 cm-14 in) and looks like a miniature Night Heron. But instead of greyish, it has buffish-white on the wings; its neck and underparts too are buffish-white. The male's crown, nape, hindneck, back and tail are black as are all the flight feathers of the wing. The female is dark brown above and buff below with dark streaks above and below. Habitat: reed-beds and screw-pine clumps in swamps, ponds and backwaters. (See *Hbk:* **1**:83)

This sight-record needs confirmation as the Little Bittern does not

seem to have been recorded from any place south of Bombay.]

60 PAINTED STORK

Mycteria leucocephala (Pennant)

Plate I, 5

INTRODUCTION : On 26-1-1988 CSK and C.Jayakumar saw a captive Painted Stork in the Parassinikadavu Snake Park. It had been captured in a paddy field in Eramam village, c. 30 km north of Cannanore in the first week of January '88 (*JBNHS* **88:**110). D.N.Kurup saw an adult with two fledgelings at Azhinjilam Chali, on 3-1-'89 and an adult and 5 juveniles in Poolenkara Chali c.700 m. away on the other side of river Chaliyar (Unpub. Ph.D. thesis, 1991.) Andrew Robertson informed CSK that Kumaran Sathasivam had seen a single Painted Stork at Thekkady (Periyar WL Sanctuary) in October '90. On 25-12-91 P.S.Sivaprasad and T.A.Natarajan saw 5 on a rocky patch at the edge of the Walayar reservoir. Crows were stooping at them and pecking their heads. On 16-4-'92 C.Susanthkumar saw three in a paddyfield near a pond on a bank of R.Moovattupuzha.

In Kerala the Painted Stork seems to be a rare vagrant, but it breeds on the eastern side of the State border in the villages of Moondaidappu, Koonthakulam and Ariyakulam, all in the Tirunelveli Dt., of Tamil Nadu.

REFERENCES : *Hbk* **1:**93; *BIB:*9; *Pic.G:*8(2); *Bs.of C:*384.

MALAYALAM NAME : വർണ്ണക്കൊക്ക്; *Varnakkokku.*

DESCRIPTION : Size : Vulture +; standing c. 93 cm (3 1/2 ft.). Sexes alike. A large, mostly white stork with a large, downcurved yellow bill, long red legs (which in the breeding season may look white or pink); naked deep pink head (red in breeding birds); large conspicuous pink patch on the side of the wing (greater wing-coverts, tertiaries and scapulars). Head, neck and body white; a broad black band glossed with green across the breast; wings black glossed with green and with a series of parallel white lines (white edges of the smaller coverts) on the black areas, and rosy-pink greater coverts. In overhead flight the whole wing looks black with a number of parallel wavy lines on the wing-lining; but for the broad black breast-band speckled with white crescents, a conspicuous pink patch on the wing and the black wing quills and tail, the plumage looks white. Large juveniles are mainly smoky brown with blackish bill and white legs.

HABITS : Outside the breeding season normally seen in pairs or small parties. Flies with neck and legs outstretched, alternately flapping wings for a while and then sailing a short distance. Soars for long periods taking advantage of thermals, circling on motionless wings, generally in the company of other storks and pelicans. Primarily a fish eater, it takes frogs, crustaceans and insects also; these are secured by stalking in shallow water, ploughing the water with the partially opened bill. Also, often stirs the mud with a leg. Feeds mostly in the mornings and evenings, resting during the rest of the day on the bunds.

63 WHITE STORK

Ciconia ciconia (Linnaeus)

Plate I, 4

INTRODUCTION : In October 1985 a small flock was found in paddy fields at Patharam some 7 kms northwest of Poruvazhi near Sasthamcotta (Quilon Dt.). Some of the birds were captured and one was gifted to the Duryodhana temple at Poruvazhi. S.Faizi of Poruvazhi identified it as a White Stork and was good enough to take KKN to see it at the temple.

Since 1985 there have been a number of reports of its occurrence in Kerala. D.N.Kurup reported (*JBNHS* **86:**239) that on 16-9-'86 one was caught from a Minister's residence in Trivandrum City, and 3 at Neyyattinkara on 21-1-'86. He was informed by the staff of the Trivandrum Zoo that they had obtained one from Kesavadasapuram in Trivandrum City in 1983. There was a report in the Malayalam daily *MANORAMA* of 18-9-'87 that 150 White Storks (they called them Siberian Cranes, but the accompanying photograph showed the birds to be White Storks) had been found near Kazhakkoottam (Trivandrum suburbs) in June 1987 and that a good number were slaughtered by local people. CSK, C.Jayakumar and Jafer Palot on 26-1-'88 saw one that had been presented to the Parassinikadavu Snake Park by some villagers of Alakode (c.35 km north east of Cannanore). It had been found in the first week of January '88 in a paddy field. LN saw two early in February '88 near the railway station at Mankara, Palghat Dt. On 26-11-1992, PON saw three at Enamavu 'Kole', Trichur. Therefore the White Strok may now be regarded as an irregular winter visitor to Kerala.

REFERENCES : *Hbk* **1**:99; *Pic.G:*8(3); *PHIB:*505; *Bs. of C:*386; *BIB:*7.

MALAYALAM NAME : വെൺബകം; *Venbakam.*

DESCRIPTION : Size : Vulture +; standing 3 1/2 ft. high. A snow-white stork with the tip and rear half of the wing and a streak through the eye black; long straight pointed bill and long legs bright red. Sexes alike.

HABITS : Usually found in small parties near large tanks ('jheels') and in marshy fields. Walking deliberately, searches for grasshoppers and other large insects, frogs, fish, etc. on which it feeds. Flies with slow wingbeats followed by a glide, with neck and legs extended. Often soars at great heights. Breeds (March to May) in Europe, north to 60°N. lat., in North Africa and Western Asia. A.A.Vaidya (*JBNHS* **83:** 433) found unusually large congregations in Kutch, Gujarat in 1984. On 2-12-'84 he saw 902+ birds in Dhand. J.S.Serrao says (*HORNBILL* 1986 (2) : 21-24) that in the winter of 1985-86 White Storks were reported from Gujarat to Kerala by 15 observers. At the same time, all over Europe, there has been a great decline in the population of this stork. Incidentally, that issue of *HORNBILL* contains a very good colour plate depicting every species of stork found in India.

65 BLACK STORK

Ciconia nigra (Linnaeus)

Plate I, 3

INTRODUCTION : Recorded in Kerala in the 1980s at a number of places.

E.Kunhikrishnan found one feeding in shallow water near the Sungam (Chungam) watchtower at Thoonakkadavu in the Parambikulam WL Sanctuary on 14-2-1984 and noted that the bird remained there for a month from that date. He saw one at the same place for a month from 16-2-'86 also. D.N.Kurup saw one on 7-1-'87 at Chamravattom (Malappuram Dt.) in the estuary of R. Bharathappuzha. On 16-2-'87 KKN saw a compact flock of 11 soaring in circles high up over the Malampuzha reservoir, closer to the hills than to the dam. Although the distance was considerable, through binoculars he could make out that, seen from below, the birds were black all over but for the breast, the belly and the top inner corner of the wings (part of the 'armpit') which were one connected block of pure white. On 24-2-'87 Jan de Groot of Amsterdam showed D.N.Kurup a Black Stork in the company of 3 White-

necked Storks at Thekkady in the Periyar WL Sanctuary (*JBNHS* **86**:239). On 12-1-'91 LN saw 7 Black Storks, and on 16-1-91 eight at the Walayar Dam. At the same place P.S.Sivaprasad and Rashmi Sivaprasad saw a flock of 14 on 25-1-'91 at 4.30 pm.. The birds were preening or resting on a sandy islet till 5.30 pm. when they flew off in different directions.

REFERENCES : *Hbk* **1**:102; *Pic.G*:8(4).

MALAYALAM NAME : കരിമ്പകം; *Karimbakam.*

DESCRIPTION : Size : standing c. 106 cm. (3 $^1/_2$ ft.) to top of head. Typical stork; glossy black all over with white only on underparts (lower breast, belly, flanks and under tail-coverts), the white of the breast extending to the top of the wing-lining to form a narrow triangle.Bill bare, facial skin and legs red. Eye brown or black. Sexes alike. (The Whitenecked Stork has a black bill, a pure white neck and black breast and belly.)

HABITS : Like the White Stork, stalks along looking for frogs, fish, insects and other animal matter in marshy ground and near rivers and lakes, in pairs and small parties of 10 to 12, often in the company of the Whitenecked Stork. Breeds in April/May in Central Europe and Central Asia.

70 BLACK IBIS

Pseudibis papillosa papillosa (Temminck)

Plate I, 1

INTRODUCTION : 'Not recorded from the West Coast and Kerala' (*Hbk*). But according to the Vernay Survey Report (*JBNHS* **39**:451) William Davison "found flocks frequenting the trees bordering the banks of the river at Manantoddy, Wynad in April 1881. They were exceedingly noisy and Davison thought they were preparing to breed." There do not seem to be any later records of this ibis in Kerala.

REFERENCES : *Hbk* **1**:112; *Pic.G*:8(7); *PHIB*:497.

MALAYALAM NAME :ചെന്തലയൻ ഐബിസ്; *Chenthalayan Ibis*

DESCRIPTION : Ibises are gregarious, long-legged birds of marshes and other wetlands; have long, slender, downcurved bills and long slender necks which are held outstretched in flight. The wings are long, the tail short.

The Black Ibis is black or dark-brown all over but for a large white patch on the wing-coverts (sometimes hidden), a red patch on the hind-crown, and brick-red legs and feet. Its head is naked, and black except for a part at the back that is covered with red papillae (wart-like growths). The bill is greenish-black or greenish-grey.

HABITS : Generally found in open country, feeding on the ground in pairs or parties of upto 30. Feeds on fallen grain, frogs, small reptiles and insects. Flocks fly in V-formation or in single file. Rest and roost in trees. In the wild, except in the breeding season, rather silent.

In Trivandrum Zoo 4 of these birds were first seen by KKN on 5-2-1971. They were in an aviary with some other water-birds. None of the Black Ibises had any red on the hindcrown. Till 8-9-'79 at least one of these Black Ibises remained alive. None of them during this eight year period developed the red papillae, perhaps due to some dietary deficiency. These ibises frequently uttered a high-pitched, nasal, whinnying call consisting of 8 to 10 *klray*'s rapidly run together, generally while perching on iron rods near the roof of the aviary.

A breeding place close to the Kerala border is Koonthakulam (see *JBNHS* **58:**514-5). There P.K.Uthaman and KKN saw a nest with 3 fledged young on 27-11-'81. The nest was at the top of a palmyra palm, a large compact one of twigs and straw placed at the base of a frond c.40 feet above the ground. On the same day they saw 17 or 18 Black Ibises standing in a row, resting on dry ground in the bed of the Periya munainji Kulam (tank). On 25-10-'81 Suresh Elamon and KKN saw a flock of 20 in a clump of acacias standing in water in Chokkikkulam (near Koonthakulam) and 13 more on the grassy verge of the tank.

71 GLOSSY IBIS

Plegadis falcinellus (Linnaeus)

Plate I, 2

INTRODUCTION : On 28-10-'87 CSK saw 7 and, along with C. Jayakumar and P.K. Balachandran one on 8-11-'87 and two on 14-1-90, all at Kattampalli. (*JBNHS* **88:**110)

REFERENCES : *Hbk* **1:**114; *Pic.G:*8(9); *Bs.of C:*379.

MALAYALAM NAME : ചെമ്പൻ ഐബിസ്; *Chemban Ibis.*

DESCRIPTION : Size : Domestic hen +/-; length c. 52 cm (25 in.). Very similar to, but smaller than, the Black Ibis, with a feathered head that is entirely black, and no white on the wings. Beak bluish-leaden; legs and feet bronze-brown with tibia bluish. Sexes alike. The breeding adult is dark chestnut or maroon-brown above, with a green and purple gloss on head and neck, lower back and rump. Tail black with a green and purple gloss. Below: chestnut, with purple under tail-coverts and axillaries (arm-pits). The non-breeding adult has head unglossed chestnut-brown, streaked with white.

Frequents marshes, mangrove swamps, coastal lagoons and river banks. Habits similar to those of the Black Ibis. Nesting not recorded in Kerala. Elsewhere it is said to breed from May to July in mixed heronries.

72 SPOONBILL

Platalea leucorodia major Temminck & Schlegel

INTRODUCTION : First reported by A.P.Jairaj, who with V.K.Sajeev-kumar, saw 7 on 25-1-1988 and 5 on 2-2-'88 all in the Manakkody 'Kole' fields c. 10 km from Trichur town. (*JBNHS* **87:**289). CSK saw one on 26-3-89 and one on 29-4-'90 at Kattampalli.

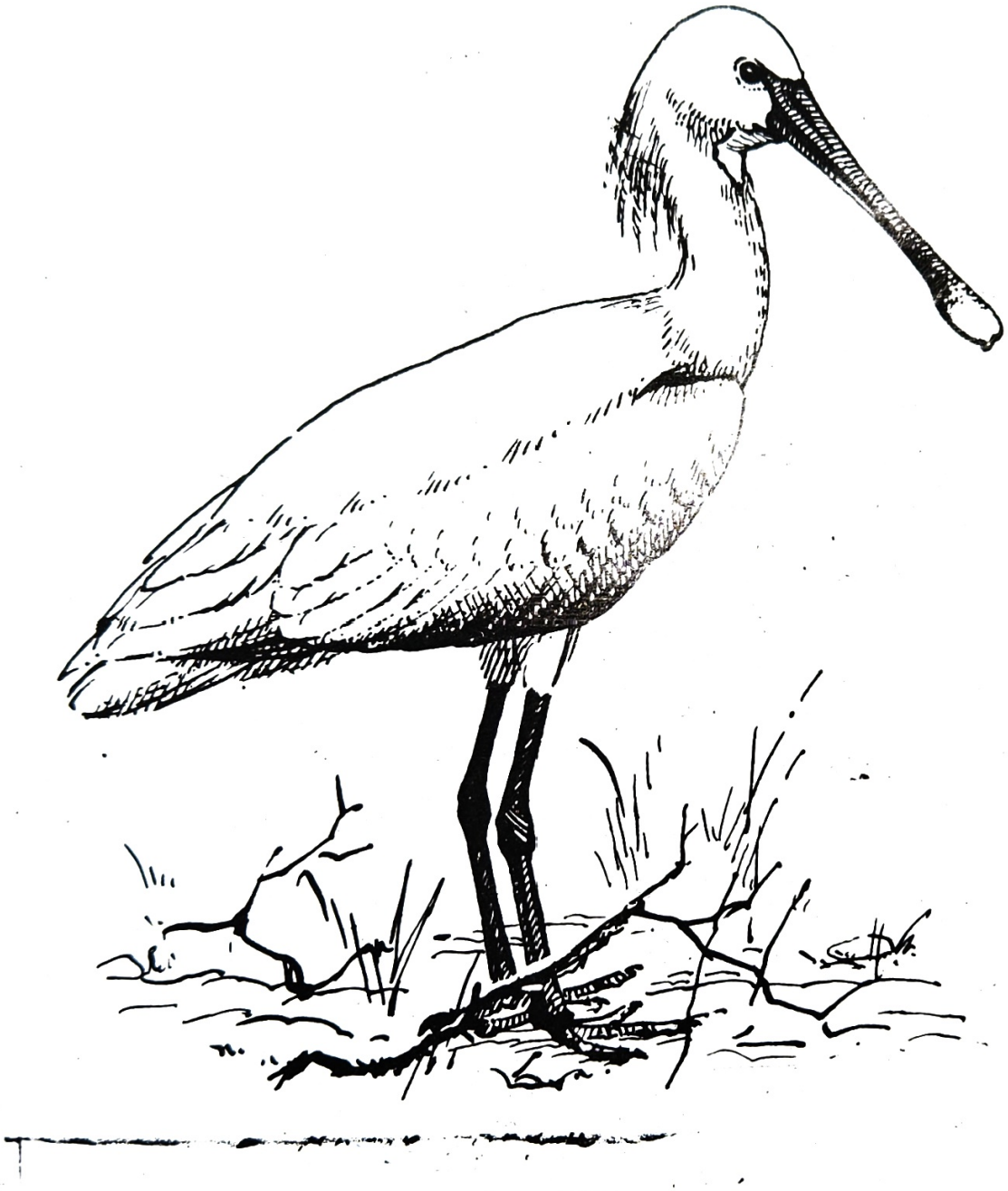
REFERENCES : *Hbk* **1:**116; *BIB:*2; *PHIB:*498; *Pic.G:*8(8); *Bs.of C:*377.

MALAYALAM NAME : കരണ്ടിക്കൊക്ക്; *Karandikokku* (ചട്ടുകക്കൊക്കൻ; *Chattukakkokkan* may be more apt.)

DESCRIPTION : Size : Domestic duck + standing c.60cm (24 in.) to top of head. A tall snow-white stork with a spoon-shaped black bill which makes the bird unmistakable. Generally found in parties near lakes, rivers, and marshes; occasionally in tidal creeks, estuaries, mangrove swamps and inundated paddy fields. Sexes alike.

Bill long (8in.) and flat, mostly black, with the flattened somewhat circular tip yellowish. Legs black. Adults have a pale yellowish-brown patch on lower foreneck. Breeding birds sport a thick drooping crest at the back of the head.

HABITS : Gregarious and sociable. Usually found in flocks with herons, egrets and other wetland birds. Feeds mostly in the mornings and evenings and is said to be partly nocturnal. Spends forenoons and afternoons dozing in the hot sun. Feeds in shallow water, wading



Spoonbill

quickly with half the bill under water, sweeping bill from side to side, stirring up the mud and snapping up the fish, frog or insect that comes into contact with the bill. Food includes other small aquatic creatures and plants also. In the air, flocks move in single file, "in wavy ribbons, each bird evenly spaced behind the one in front. The neck and legs are fully extended in flight."

Breeding : Not recorded in Kerala. Nearest breeding places : Ranganathittoo (Karnataka, c. 16 km from Mysore City) and Vedanthangal (Tamil nadu, Chengalpet Dt.) during the monsoons.

73 GREATER FLAMINGO (THE FLAMINGO)

Phoenicopterus roseus Pallas

INTRODUCTION : No definite records of any flamingo from Kerala before February 1991. (KKN was told by P.L.Samy, then Administrator of Mahe, in 1968, and also by K.Anandan of Western India Plywoods, Cannanore, that some flamingos had been shot at the foot of Ezhimala and on the banks of the Baliapatam River in the early Sixties). D.N.Mathew and his students (University of Calicut) saw five flamingos at Purathoor, the estuary of R.Bharatappuzha on 4-2-'91 which Dr.Mathew identified as of the larger species. These five were seen on 12-2-'91 by R. Venugopalan, Jafer Palot and Rasheed, and on 10-3-'91 by P.K.Ravindran and by D.N.Kurup in the same year. Both the Large and Lesser Flamingos are regular visitors to suitable localities on the East Coast such as the Vedaranyam Swamp (Point Calimere, Tanjavur Dt., Tamil Nadu) right down to Rameswaram. On 21-12-'91 CSK saw a single Greater Flamingo at Kattampalli. "Taller than the Grey Heron beside which it was feeding; upper mandible overlapped the lower. The grey colour of head, body and legs indicated that it was immature."

REFERENCES : *Hbk* **1**:118; *Pic.G.*3(2); *Bs.of C.*:405.

MALAYALAM NAME : വലിയ പൂനാര; *Valiya Poonara* or വലിയ രാജഹംസം; *Valiya Rajahamsam*

DESCRIPTION : Size : Vulture +; 4 1/2 ft. tall.

Flamingos are large, stork-like birds with extremely long slender necks, extremely long thin legs, and thick, downcurved bills. Gregarious. Normally met with in flocks in shallow lakes, lagoons, salt pans, estuaries and tidal mudflats. Fly with necks and legs fully extended. Sexes alike.

The Greater Flamingo is pinkish-white, with black wing-quills (primaries and most of the secondaries), and a white tail. The upper part of the wing (the coverts) and the wing-lining are scarlet. The bill is pink, with a black tip. The legs too are pink [The Lesser Flamingo is smaller (stands a foot shorter than the Greater) and has a deeper pink body and a much darker red bill. In the field, especially when only one species is present, identification is tricky.]

HABITS : Normally found in flocks, standing in line or slowly moving forward in shallow water. Feeds by bending neck straight down and submerging beak and head to rake the silt. Mouthfuls of mud are taken up, the water squeezed out with the thick tongue, and the residue, with small molluscs and other creatures as well as vegetable matter swallowed.

NESTING : In India flamingos breed between September and April in the Great Rann of Kutch. Thousands of pairs raise conical mounds of mud cheek by jowl, each with a shallow saucer-shaped depression at the top in which the eggs (normally only one) are laid.

82 BARHEADED GOOSE

Anser indicus (Latham)

Plate II, 5

INTRODUCTION : Though reported from Kollegal (Karnataka), Coimbatore and Tuticorin (Tamil Nadu), the only record from Kerala is that of one seen by D.N.Kurup on 25-11-'87 in the Kadalundi Estuary. It may be provisionally admitted to the Kerala list.

REFERENCES : *Hbk* **1:**131; *Pic.G:*12(12); *BIB:*11; *PHIB:*520.

MALAYALAM NAME : കുറിത്തലയൻ വാത്ത്; *Kurith-thalayan vaath-thu.*

DESCRIPTION : Larger than domestic duck; length 75 cm (30 in.) A wild goose with a white head and two conspicuous black bands across the back of the head (the nape) can only be a Barheaded Goose. Overall coloration ash-grey. The white of the head extends to form a stripe on either side of the dark brown neck. Bill, legs and foot yellow. Sexes alike.

HABITS : Generally found in flocks of 5 or 6 to about a hundred in lakes and large rivers, resting by day on the sandbars or mudflats and feeding mostly at night in fields of cereals.

BREEDING : The nearest breeding places are Ladakh and Tibet. Season : May - June.

[89 LARGE WHISTLING TEAL

Dendrocygna bicolor (Vieillot)

According to *SYNOP*.2 this bird has been recorded as a straggler to Sri Lanka though its normal range is northern India south to the Deccan. In the *Hbk* (1:139) the distribution is left rather vague. KKN has a doubtful sight record of this teal. On 2-8-'84 from a train standing at the Irinjalakkuda railway station he had a clear dorsal view of a whistling teal that flew low and alighted in a flooded field of newly transplanted paddy seedlings. This bird had a prominent white patch near the base of its tail. On a number of occasions, but always from fast-moving trains, he has seen pairs of whistling teal some of which could have been of this species, flying over the fields between Pudukkad and Chalakudi. Birdwatchers resident in, or visiting the above area should be on the look-out for whistling teal, paying particular attention to the colour of the upper tail-coverts of those they come across. If they sight any large Whistling Teals, they should kindly inform CSK with details of locality, date and time, along with a description of the bird(s) they saw.

Diagnostic features of the two species of whistling teal are :

	Hbk No.88. LESSER W.TEAL	Hbk No.89. LARGE W. TEAL
Upper tail-coverts :	Chestnut; no striking contrast between back, rump and tail.	Whitish or cream-coloured; contrast between rump and tail striking.
Crown :	Blackish or dark brown, forming a distinct 'cap'.	No 'cap'; crown more or less of the same colour as the rest of the head.
Neck:	No black line down the back of the neck and no "collar".	A black line down the back of the neck; a buff patch streaked with grey on side of the neck ("a diffuse rusty-whitish collar round middle of foreneck" *Hbk.*)

If individuals of both species are together, note the wing-coverts: maroon in Lesser and dull chestnut in Large; Large will also be taller than Lesser.]

90 RUDDY SHELDUCK (BRAHMINY DUCK)

Tadorna ferruginea (Pallas)

Plate II, 4

INTRODUCTION : According to *JBNHS* **39**:460 on 15 Nov., 1935 Phythian-Adams "shot one of the only pair he had ever seen at Cannanore." On 14-1-'88 D.N.Kurup saw one at Purathoor, the estuary of R.Bharathapuzha. He saw one on each of 4 subsequent visits, the last being on 31-3-'88. A report of this in the Malayalam daily, "*MATHRUBHOOMI*" says that according to Sri.E.Ayyappan, Deputy Collector, Wynad, and a native of Purathoor, local people had been seeing this bird (always one pair only) every winter since 1984 or '85. However, D.N.Kurup saw only one bird. According to the *Hbk* the Ruddy Shelduck is a winter visitor (October to April) to South India.

REFERENCES : *Hbk* **1**:141; Pic.G:11(1)&13(1); *BIB*:15; *Bs.of.C*:412; *PHIB*:524.

MALAYALAM NAME : തങ്കത്താറാവ്; *Thankath-thaaraavu* or ചക്രവാകം; *Chakravakam*

DESCRIPTION : Large duck, goose-like in shape; orange-brown above and below, with paler head and neck. Wing-quills, tail, bill, legs and feet black. Speculum glittering green, with a white patch in front of it. In overhead flight orange-brown body and white wing-lining contrasting with black wing-quills distinctive.

The breeding male has a narrow black ring round base of neck, less evident in winter; female resembles male but lacks the black neckring. Call: a loud, nasal *aa-ong* or *aa-onk*.

HABITS : Usually found in pairs in large rivers and lakes; spend the day resting on sand-banks and at dusk fly to near-by fields to feed. In addition to grain, grass and tender shoots, they eat molluscs, crustacea and insects.

NESTING : Nearest breeding place Ladakh.

MISCELLANEOUS : In Hindi the male is called 'chakwa' and the female 'chakwi'. According to a popular legend, Chakwa and Chakwi were human lovers separated by fate and ultimately transformed into a pair of ducks and condemned to remain in sight and hearing, but separated by a flowing stream. They have been calling to each other ever since.

93 PINTAIL

Anas acuta Linnaeus

Plate II, 1

INTRODUCTION : First reported by KKN who saw 3000 + on 7-2-'81 at Ambalamedu, near Cochin (*JBNHS* **79**:667-8) and about the same number on 7-3-'81, 16-2-'86 and 27-2-'89 at the same place. CSK and fellow birdwatchers saw 3000 + on 7-2-'82, 6000 + on 15-1-'89 and 8000 + on 14-1-'90 at Kattampalli where this duck is seen from November to March. One January (the peak month) fifty per cent of the 10,000 noted at Kattampalli were males. (At Ambalamedu this and other ducks arrive only in January.)

REFERENCES : *Hbk* **1**:149; *Pic.G.*:9(2) and 10(2); *PHIB*:532; *Bs. of C*:414.

MALAYALAM NAME : വാലൻ എരണ്ട; *Vaalan Eranda.*

DESCRIPTION : Size : Domestic duck; length: Male 74 cm (29 in.) of which c. 18 cm. (c.7 in) is tail.

A slender, graceful, long-necked duck with a pointed tail. The pattern on the male's head and neck and the long pointed tail are diagnostic. The male's head, face and throat are chocolate, the hind-neck black. A wedge-shaped white band on either side of the neck broadens as it runs down to merge with the white of the breast and the belly. His upperparts and flanks are grey, with very fine black lines across the body. His speculum is bronze-green, with a cinnamon border in front, and a white border behind. The black scapulars and upper tail-coverts have conspicuous silver-grey edges. The long tail feathers are black; and under tail-coverts black with a broad buff band in front. The female is mottled brown, with an indistinct brown speculum bordered on both sides with white. The rear border forms a narrow white trailing edge on the inner half of the wing.

STATUS, HABITAT, & HABITS : Winter visitor (October to March). Affects reedy lakes, brackish lagoons, backwaters and estuaries. Usually found in flocks of about 20 to many hundreds. They spend the day resting in the middle of tanks and lakes, flying at dusk to marshes and paddy fields to feed on grass, shoots, worms and the seeds of aquatic plants. The flight is very swift and the wings produce a swishing sound. 'Dabbling ducks', they often feed with the forepart of the body fully submerged.

BREEDING : In the northern half of the Eurasian continent.

97 SPOTBILL DUCK (GREY DUCK)

Anas poecilorhyncha poecilorhyncha J.R.Forster

Plate II, 2

INTRODUCTION : First reported as occurring in Kerala by P.K. Uthaman who saw and photographed a group of 4 in the Mangalam Reservoir, Palghat on 13-3-'83. In the Kadalundi Estuary, LN saw 2 on 9-9-'85 and with P.K.Uthaman, 3 on 15-2-'87. PKU points out (in *BLACKBUCK* 1991, Vol. VII No.1; p.8) that though reputed to be an exclusively freshwater species, at Kadalundi it was in brackish water, close to the seacoast. On 16-2-'87, KKN saw a group of 5 near a small island close to the dam at Malampuzha. At Matakkara CSK saw 4 on 20-9-'87, four on 31-10-'87 and 32 on 16-10-'88. The Spotbill Duck may, therefore, be regarded as a frequent winter visitor to Kerala (not yet recorded south of Palghat) and be admitted to the Kerala list.

REFERENCES : *Hbk:***1:**157; *Pic.G:*9(3); *BIB:*13; *PHIB:*527; *Bs.of C:*413.

MALAYALAM NAME : PKU named it പുള്ളിച്ചുണ്ടൻ താറാവ്; *Pullichundan Thaaraavu*

DESCRIPTION : Size domestic duck; length c. 61 cm (24 in.) A large duck, dark brown and black above, covered with a scaly pattern (produced by the pale edges of the feathers); white head and neck, with a blackish 'cap' and a dark brown streak through the eye; bill black with a yellow tip and a red spot on either side of the upper mandible close to the forehead; legs orange-red; speculum metallic green, bordered on both sides with black and white bands; a conspicuous white patch on the wing (produced by the broad, white outer webs of the tertiaries). Breast and underparts greyish, spotted with dark brown.

The combination of mottled greyish coloration, black bill with a yellow tip and red spots at its base, the reddish legs and the green speculum make this duck easy to identify.

HABITS : Usually seen in pairs or small parties, seldom in the company of other ducks. Its haunts are weedy tanks and jheels. Chiefly a vegetarian, it eats small aquatic animals also, securing much of its food by 'up-ending' and grubbing the silt in shallow water.

NESTING : Not recorded in Kerala. Season ill-defined, but chiefly the monsoon months. The nest, a compact pad of grasses and weeds, is built on the ground near the edge of a tank or swamp, well concealed amidst bushes.

101 GADWALL

Anas strepera strepera Linnaeus

Plate II, 3

INTRODUCTION : *BOK*.p.43. SA says Hume had it reported to him from Wynad while the VS Report (*JBNHS* **39**:460) says, "Hume (S.F., X,418) was almost sure that it had been reported to him from the Wynad." SA had the impression that the mixed flocks of teals he saw in the Vembanad also contained a small number of Gadwall.

REFERENCES : *Hbk* **1**:163-5; *Pic.G*:9(12), 10(12); *PHIB*:529; *FG BSEA*:60; *FG B BE*:33.

MALAYALAM NAME : ഗ്യാഡ്വാൾ എരണ്ട; *Gadwal eranda.*

DESCRIPTION : The Gadwall is a medium-sized (length 51 cm. or 20 in.) somewhat dull-coloured duck. Both sexes have a white speculum which is conspicuous in flight.

Male : a brown and grey bird whose velvet black 'stern' (hind end, upper & under tail-coverts) is distinctive. In flight, the large white speculum on the dark wings and black tail-coverts contrasting with the white belly are distinctive. The white speculum is divided from the chestnut of the wing-coverts (less extensive in female) by a broad black bar that joins the black bar on the outer edge of the white speculum. Female resembles females of Pintail, but is distinguishable from it by the white speculum, shorter tail, white belly and dull orange-yellow legs.

Mainly a freshwater duck, found in pairs or flocks of upto 30 in lakes, rivers and marshes. Reedy wetlands which provide good cover preferred to open waters. A dabbling duck; seldom dives. Food mainly vegetarian. Breeds in Central Europe and Central Asia. Winter visitor to Kerala.

115 NAKTA or COMB DUCK

Sarkidiornis melanotos melanotos (Pennant)

INTRODUCTION : According to the VS Report (*JBNHS* **39**:458), "Hume says (S.F.,X,417) that he believes it occurs in the Wynad". On 17-1-1993, P.K.Ravindran, C.P.Sethumadhavan and PKU saw four flying out of a reedy patch of water at Maranchery 'Kole' paddy fields (Trichur Dt.) and on 21-1-1993, P.K.Ravindran and Sethumadhavan along with PON and P.S.Sivaprasad saw three female Comb Ducks at the same place.

"Resident, shifting locally with water conditions. Occurs practically in all India,.... south to Mysore (rare)." - *Hbk*

REFERENCES : *Hbk* **1**:192; *Pic.G*:12(5); *PIHB*:506; *Bs of C*: 408; *FG B SEA*:114

MALAYALAM NAME : മുഴയൻ താറാവ്, *Muzhayan Thaaraavu.*

DESCRIPTION : Size : Domestic duck +; length : male *c.*76 cm. (30 in.), female *c.*61 cm. (24 in.) Large black and white duck.

Male : head and neck white with black spots; rest of the upper parts, wings and tail glossy black, lower back brownish grey. A collar round the lower neck and lower parts pure white. "A black bar extending on to each side of the upper breast and another to the lower flanks." Wing speculum bronze. A fleshy black comb on base of the upper mandible at the forehead conspicuous. Legs and feet leaden grey. No eclipse plumage. Female : similar, but much smaller and duller, lacks comb.

HABITS : Small groups of 4 to 10 birds in marshy lakes, reedy bunded tanks and paddy fields. Feeds on grains, roots, seeds and shoots of aquatic plants and also water insects and their larvae; occasionally frogs and fish. Food obtained mostly by grazing. A good walker. Perches on branches of trees even during daytime and roosts in trees at night. Less nocturnal than other ducks. Flight powerful and swift, "wing-action reminiscent of geese."

BREEDING : Not recorded in Kerala. Season elsewhere during SW monsoon, mainly July to September. Nest, normally in a large natural hollow in a tree standing in or close to water, some times a considerable distance away. Scantily lined with dry leaves, grass or feathers or unlined.

172a WHITETAILED EAGLE

Haliaeetus albicilla (Linnaeus)

INTRODUCTION : Jafer Palot saw one on 18-12-1991 near Mullaperiyar Dam, Periyar WL Sanctuary, sailing low over the lake. He could observe it very clearly and note all diagnostic features.

Hbk and *SYNOPSIS* 2 describe it as a winter visitor to Pakistan; a few sightings reported from Nepal, Himachal Pradesh, Gujarat and Rajasthan (Bharatpur). HA, in his '*Checklist of the birds of Delhi, Agra and Bharatpur*' (1978) has classified it as an accidental straggler, far out of normal range. A sight record at Chilka Lake (Orissa) in

1979 also has been reported. (*JBNHS* **78**:166).

REFERENCES : *Hbk* **1**:286; *Pic.G:*14(4); *FG B SEA:*75.

DESCRIPTION : Kite +; length *c.*69-86 cm (27-34 in.) Huge, broad-winged eagle, dark brown with pale head, neck and upper breast and short strongly wedge-shaped white tail.'Jizz' of the flying bird more vulturine - tail much shorter and wings much broader and more square ended. Bill and feet yellow. Sexes alike, female larger.

HABITS : Found mainly at sea-coasts, but also remote lakes, marshes etc., inland. Lives largely on fish caught near surface, while sailing close above water. Also takes birds and medium sized mammals on occasion and feeds on carrion too. Call:"a low yelping noise reminiscent of a puppy dog (T.J.Roberts)." - *Hbk.*

BREEDING : Extralimital.

179 CINEREOUS VULTURE

Aegypius monachus (Linnaeus)

INTRODUCTION : In Europe known as the Black vulture. Not recorded from Kerala or any place south of 21 ° N. latitude till December 1988 when, according to R.S.Sreekumar (*JBNHS* **88:**111) local people captured an exhausted specimen at Kanjirappara (Pathanamthitta Dt.) and handed it over to Forest Department Officials who gifted it to the Trivandrum Zoo. An accidental straggler?

When, on 18-12-'90, KKN saw this bird in the zoo it looked quite healthy. A puzzling feature of the plumage was a large, pure white patch on each wing. On 5-2-'91 Suresh Elamon took some photographs of this bird which show that the outer webs of some contiguous secondaries are fully or partly white.

REFERENCES : *Hbk* **1**:298; *Pic.G:*16(6); *FG BBE:*64; Bouchner M: *A CONCISE GUIDE IN COLOUR-BIRDS OF PREY OF BRITAIN & EUROPE* (1976 London, Hamlyn.) p.p.64-67.

MALAYALAM NAME : കറുത്ത കഴുകൻ; *Karuth-tha Kazhukan.*

DESCRIPTION : Much larger than the Indian Black (King) Vulture; length 100-110 cm. (40-42 in.) A huge vulture, dark brown (almost black) allover with very long, broad wings. Head partly covered with brownish fur-like feathers, with a black mask-like patch around each eye; bare skin of head and neck bluish-grey or bluish-pink; a dense

ruff of blackish feathers at base of neck. Cere bluish; legs and feet whitish. Sexes alike. There are no red wattles on the head; no white on the underparts or underwing.

HABITS : More or less those of other vultures, but usually solitary at carcasses. According to *Hbk* it avoids forest, but the bird caught at Kanjirappara was found in forest. Nearest breeding place: Baluchistan. Included in the ICBP's *Red Data Book* of threatened birds of the world.

208 LAGGAR FALCON

Falco biarmicus jugger J.E.Gray

INTRODUCTION : On 16 February, 1933, SA saw a bird of prey which seemed to be of this species, being chivvied by a Shikra, in forest near Mundakayam, C.1000 ft (c.305 m)

A detailed description of the Laggar Falcon follows.

REFERENCES : *BOK* P.78; *Hbk* **1**:344-6; *PHIB*:382-384 *FGBSEA:* 98; *Pic.G:*29(14) 30(14)

DESCRIPTION : Size : Slightly smaller than Kite; c.43-46 cm. (17-18 in.) Sexes alike, female larger.

Ashy-brown above, white with brown markings below. In flight the pointed wings and full tail noticeable. Ashy-brown underparts distinguish it from falcons of the peregrinus type. Head generally paler than rest of upperparts which are a plain dark brown; moustache narrower than the Peregrine's; middle tail feathers unbanded. In overhead flight, a dark patch formed by the dark brown flanks, axillaries and thighs is striking; dark brown underwing coverts contrast with paler under sides of remiges. Sides of face and all underparts buffy white; narrow brown streaks ('longitudinal light brown drops'-*Hbk.*) on flanks and abdomen; also usually on breast. Underparts of immature birds dark brown with the exception of the throat which is buff-white. According to *Hbk*, in overhead flight the white breast, dark-and-white markings on wing-lining and the fact that usually two birds are seen together are clues to this bird's identity.

Resident. Rare in South India. Avoids humid forest, preferring thin jungle, cultivation and dry open country. Feeds on small birds, rats, lizards, grasshoppers and other insects.

Call : a shrill, drawn-out *whi-ee-ee*, but seldom uttered.

250 GREY QUAIL

Coturnix coturnix [*coturnix* (Linnaeus)?]

INTRODUCTION : *BOK*. p.83. SA's brief note on this bird, put within square brackets, refers to an unconfirmed sight record of a single bird flushed on a grassy hillside at Peermade on 22-2-1933.

REFERENCES : *Hbk* 2:37-40; *PHIB*:422-4.

MALAYALAM NAME : ചാരക്കാട; *Charakkada.*

DESCRIPTION : Quails are very difficult to watch and identify in the field. Often trapped by professional bird-catchers giving bird-watchers opportunity to examine and even measure specimens. Therefore, a detailed description based on *Hbk& PHIB* is given here.

Looks like miniature partridge and has 4 toes. Length c. 20 cm. or 8 in. In both sexes back and wings pale brown with conspicuous buff spear-shapped streaks and irregular barring in reddish brown and black.

Male : top of head black barred with brown, with a pale buff line down centre of crown and a longer, broader one above each eye. Distinctive black, anchor mark on throat (i.e. chin and a dark line down centre of whitish throat black, two dark gorget-like bands (sometimes indistinct) curve up from base of throat to ear-coverts.) Breast rufous-buff with pale shaft-stripes, passing into white from lower breast downwards. Flanks brown, spotted with blackish and boldly marked with whitish shaft-streaks. Female lacks black anchor mark on throat; chin & throat creamy buff; breast spotted with blackish.

Iris yellow-brown; bill horny-brown; legs pale fleshy-brown or yellow.

The outer webs of the primaries of Grey Quail are barred with buff; those of rather similar Blackbreasted or Rain Quail (*Hbk* No. 252) are unbarred. In 252 dark marks on face and throat are jet-black strongly contrasting with white cheeks. Its call is a rapidly repeated musical *whit-whit.... whit-whit.... whit-whit....* (See *BOK* pp. 82-3)

STATUS & HABITS : Winter visitor. Affects open country, cultivation, standing crops and scrub jungle. Ground-feeder. Food mostly grains; insects and grubs also taken. When flushed, shoots up a few feet, flies a few hundred yards with whirring wings and drops into cover.

Call distinctive : a loud whistle followed by two short ones, described in *PHIB* as "a very liquid *wet-me-lips*" and attributed to the male.

Breeds in north India, chiefly March to May.

275 RED SPURFOWL

Galloperdix spadicea spadicea (Gmelin)

INTRODUCTION : Ripley's *SYNOPSIS 2 (1982)* and the *HAND BOOK* (2:67) include northern Kerala (Wynad) in the range of this form, probably on the basis of the statement in the VS Report that it is "found throughout the Wynad" Therefore, on page 87 of *BOK* "Distribution outside Kerala" may be amended to "Distribution outside South Kerala" or to "outside the range of *G.s.stewarti*".

REFERENCES : *Hbk* 2:67; *Pic.G:* 31(11); *BOK*:88.

MALAYALAM NAME : തവിട്ടുതലയൻ കാട്ടുകോഴി; *Thavittu-thalayan kattukozhi.*

DESCRIPTION : Same size as of *Hbk* No.277.

Male : above, crown dark brown, paler and greyer on face and neck; upperparts rufous-chestnut with black and rufous vermiculations and greyish brown scallopping. Below, rufous-chestnut scallopped with greyish brown. 2 to 4 pointed spurs on each leg. A naked brick-red patch round eye.

Female : above, forehead sandy brown; crown and nape blakish-brown; upperparts greyish or sandy, with a rufous tinge, finely barred with black. Below, chin and throat whitish. Breast and flanks pale rufous chestnut, spotted with black. A naked reddish patch round eye. One or two pointed spurs on each leg.

Immature : male like adult female but more richly and deeply coloured, with more black in proportion to buff and rufous. (*Hbk*).

According to the keys in *Hbk*, the species *G.spadicea* has breast chiefly chestnut or rufous in males, chestnut with black tips to the feathers in females.

The differences between the subspecies *G.s.spadicea* and *G.s.stewarti* are given in the museum dagnosis on page 88 of *BOK*.

In the museum diagnosis under No.275 in *Hbk* 2:68, Salim Ali says, "A feature unrecorded in published descriptions is the tuft of somewhat elongated feathers on the crown in both sexes, often raised into a crest in life". The illustrations on p 67 (op.cit) show this 'crest'. This note was brought to our notice by T.Madhu who had noted the crest in the birds he had watched near Pazhayannur (Palghat Dt.)

278 PAINTED SPURFOWL

Galloperdix lunulata (Valenciennes)

INTRODUCTION : See SA's footnote on page 88 of *BOK*.

Aramboli is now part of Tamil Nadu. The specimen in the BNHS collection from 'Travancore' (*JBNHS* **66**:267) could also have come from Aramboli. However, the VS Report (*JBNHS* **38**:683-4) says, "it also occurs south of the Nilgiris in the Palghat district and Hume (loc. cit. and N&E III:425) received several specimens thence, apparently, from the Walliar jungles." (Walliar=Walayar).

On the strength of this *G.lunulata* may be included in the Kerala list. A more detailed description than is given by Salim Ali in the short note in the *BOK* is given below:

REFERENCES : *Hbk* **2**:70; *BIB*:134; *PHIB:* 421; *Pic G*:31(13).

MALAYALAM NAME : പുള്ളി മുള്ളൻ കോഴി; *Pulli Mullan Kozhi*

DESCRIPTION : Similar to the Red Spurfowl in shape, size and habits. "May easily be distinguished by the black and white spotting of the plumage of the male, while the female is a plain brown bird with a chestnut face." (Whistler).

The cock's forehead and crown are metallic greenish-black with numerous white spots (each feather having 'an elongate white drop'); sides of the head and all round the neck black, with broader white spots. Upperparts chestnut, marked with black-edged ocelli (eye-spots). Part of the wing metallic green. Tail blackish with a green gloss. Breast and upper abdomen buff with numerous triangular black spots. Lower abdomen and flanks chestnut with black-bordered white spots. Under tail-coverts chestnut, the feathers black-tipped. Female chiefly dark olive-brown and chestnut above, with black crown. Pale olive-brown below; throat buff with chestnut mottling; breast yellowish.

HABITS : This is a bird of the bamboo jungles and dense thorn scrub in drier and rockier country than the Red Spurfowl. A great skulker and fast runner, it prefers to dash through the bushes and hide in some hole or rock-cleft. It feeds on seeds, tubers, berries etc. and insects especially termites. Descriptions of voice in books equivocal, even contradictory.

STATUS : Resident in continental and peninsular India south of the Gangetic plain, plains and hills upto c.1000m. No recent records from Kerala. Birdwatchers visiting the dry scrub jungles of Walayar should look for this bird and if met with report its presence to C.Sashikumar and the BNHS.

BREEDING : Not recorded in Kerala. Elsewhere chiefly February

to June. Nests like the Red Spurfowl on the ground under boulders, roots etc.

313 LITTLE BUSTARD-QUAIL

Turnix sylvatica dussumier (Temminck)

INTRODUCTION : As the only record of this bird SA knew of was J.Stewart's he was disinclined to admit it to the Kerala list. Although no one else seems to have reported it from Kerala till now, it may be worthwhile adding to the information given in *BOK* as *SYNOPSIS* 2 says it is found throughout the subcontinent south to Kerala.

Hbk (**2**:128-9) gives length of male as c. 13cm. (5 $^1/_2$in.). Female a little larger. Distinguished from the other three-toed quails by smaller size and distinctly pointed small tail. Crown blackish-brown with a whitish stripe along the middle; sides of head and supercilium buffy-white speckled with black; back of neck rufous, each feather edged with buff; above, chestnut-brown, feathers thinly barred with black and with yellowish-white fringes; yellowish-white edges of feathers more striking on upper back and shoulders; wing-coverts yellowish-white with black-edged chestnut spots; remiges brown, the outer feathers buff-edged. Below, whitish; breast buff with black and chestnut spots on the sides. Bill grey (plumbeous); legs fleshy-white. Lacks hind-toe.

Ben King warns : 'Usually impossible to separate in the field from Yellow-legged.' (*FG B SEA:*110).

STATUS : Resident; also seasonally nomadic in parts (*Hbk* **2**:129)

REFERENCES : *BOK* p.93; *Hbk* **2**:129; *Pic.G:*32(1); *FG BSEA:*110; *PHIB:*434.

350 COOT

Fulica atra Linnaeus

INTRODUCTION : LN and P.S.Sivaprasad saw a single Coot with teals in the Azhinjilam Chali (jheel) 25km SW of Calicut on 6-12-'80 (*NLB* 21 March-April 1981 p.10-11). In the *NLB* for July-August

1981 T.V.Jose commenting on this record stated that in his "childhood" he had seen Coots in ones and twos in Trichur in the months of September and October, "year after year".

CSK saw it at Kattampalli first on 7-2-1982 and later in '87, '89 and '90 (all in Dec, January and February). The largest number seen was 48 (on 14-1-1990). On 22-3-1986 Jafer Palot saw a captive bird at Ezhome in Cannanore Dt.. On 16-2-'92 CSK and others noted two in the 'Kole' lands near Trichur.

REFERENCES : *Hbk* **2:**180-1; *Pic.G:*36(15); *BIB:*41; *Bs. of C:*354; *PHIB:*441.

MALAYALAM NAME : വെള്ളക്കൊക്കൻ കുളക്കോഴി; *Vellakkokkan kulakkozhi.*

DESCRIPTION : Blackish plumage, conspicuous white bill and forehead (the 'frontal shield') and narrow white trailing edge on the wings diagnostic. Practically tailless. Sexes alike. Head glossy jet-black, eyes red; legs and lobed toes green.

HABITS : Gregarious, especially at winter resorts. Usually found swimming in open water. Swims and dives very well. May be mistaken for a duck while swimming, but its habit of jerking the head forward at every stroke of the feet is a good clue to its identity. It feeds on the seeds and shoots of water-plants as well as on various small aquatic animals. It can fly quite well, but has to patter along the surface of the water for some distance before it can take off. In flight the short, rounded wings are flapped rapidly, and the large feet trail behind.

Utters a loud trumpeting and various other calls.

In June 1945, at Chennapatna(Karnataka) KKN noted that among the calls uttered were a low *kyo* or *kyot; chek; kchow;* bickering birds uttered a sharp *chek-kung*.

STATUS :Resident as well as winter visitor to most parts of India, particularly abundant in the larger wetlands of N.India in winter. Not uncommon in S.India though first reported from Kerala only in 1981.

BREEDING : On 11-6-1992, at Akkulam backwaters, Trivandrum, C.Susanthkumar saw 3 Coots accompanied by 9 chicks which were about the size of Little Grebes, black in colour with red beak and forehead. Breeding has been reported from Karnataka (Bangalore) and Tamil Nadu (Coimbatore). The nesting season seems to be November-December. P.S.Sivaprasad found a pair with 2 chicks in the Velankulam tank (Coimbatore) on 29-12-1983. (*BLACKBUCK* II (2)1986).

355 HOUBARA BUSTARD

Chlamydotis undulata macqueenii (J.E.Gray)

INTRODUCTION : Winter visitor chiefly to NW India, found in open semi-desert with cultivation, and sand dunes. Only once recorded in Kerala. CSK reported (*JBNHS* **86**:101) that a specimen was captured on 5-11-'86 near the seashore at Chettukundu, a village near Kanhangad, Kasaragode Dist. It died on 8-11-'86. This was reported to CSK by C.Jayakumar. From the photograph and some feathers sent to him, Dr.Asad Rahmani of the BHNS confirmed that it was a Houbara.

REFERENCES : *Hbk* **2**:191-3; *Pic.G*:37(4); *FGBBE*:p.110.

MALAYALAM NAME : ഹൗബാരാ; *Houbara.* or മരുക്കൊക്ക്; *Marukkokku.*

DESCRIPTION : A long-legged, long-necked land bird of open treeless country. Larger than a domestic hen. Length : 73 cm (29 in.) height 60 cm (24 in). Carries body horizontally at right angles to the stout, bare legs.

Sandy-buff above, mottled and vermiculated with black; below, white barred blackish on the flanks. Tail marked with bluish-grey bars. Legs and feet greenish, lead-coloured or brownish yellow. In flight, white underparts and round white patches near the blackish wingtips are conspicuous. The male has a ruff or 'collar' of black and white feathers on either side of the neck and a tuft of longish feathers from the throat overhanging the breast. The female is somewhat smaller with less developed ruff and neck plumes.

HABITS : Walks about sedately looking for food such as locusts, other large insects, lizards, grain, shoots, etc. Though it can fly quite well, when alarmed, it prefers to run at great speed. If pursued, it tries to escape notice by crouching behind a bush or clump of grass or lying with the neck outstretched so that it blends perfectly with the sandy background. A rather silent bird.

BREEDING : The nearest breeding place seems to be Baluchisthan.

Included in the ICBP's *Red Data Book.*

371 GREY PLOVER (BLACKBELLIED PLOVER)

Pluvialis squatarola (Linnacus)

INTRODUCTION : Not included in *BOK* although Whistler says, "Phythian Adams informs me that he shot 7 from a flock of 25..

in January 1933 at a place 14 miles north of Cannanore..... the only occasion on which he met with the species in S.India." (VS Report: *JBNHS* **39**:250)

On 6-10-1973 KKN saw a single Grey Plover with black on the underparts at Muthalappoozhi (Perumathura, c.30 km north of Trivandrum and not far from Anjuthengu, the 'Anjengo' of earlier literature); and on 19-11-'78 three, on 22-1 and 28-1-'79 one; on 11-2-'79 three at the same place or at Poovar (c.25 kms. S of Trivandrum). At Kadalundi LN noted it for the first time on 5-10-1985 and saw some on every visit between 5-10-1985 and 10-3-'86, sometimes in flocks of upto 25. LN saw the Grey Plover on the Badgara sandbanks and at the Azheekkal estuary (Cannanore Dt.) also. (*JBNHS* **86**:458-9 and *BLACKBUCK* VII (1):3-11). CSK, C.Jayakumar and Jafer Palot saw 7 at Matakkara on 8-3-1986 and subsequently some every winter. On 15-10-91 and 19-10-91 CSK saw one in breeding plumage. At Matakkara too, it is a regular winter visitor, 10-20 being usually present. Earliest date on which a bird was seen: 30th Sept (1989); the latest, 24th April (1991).

D.N.Kurup saw the Grey Plover regularly between October and April in 1987-88 at Kadalundi; in March and October 1988 and in January and February 1989 at Purathoor. He saw it in the Palakkal estuary south of Ezhimala also. S.E.Lauritzen saw one on Kappad beach on 4-11-91.These recent records suggest that the Grey Plover is now a regular winter visitor to the Kerala coast.

REFERENCES : *Hbk* **2**:220-1; *Pic.G.*:38(6); *Bs.of C.*:282; *Sh.Bs.*:280.

MALAYALAM NAME : ചാര പ്ലുവർ; *Chara plover.*

DESCTIPTION : Size : Redwattled Lapwing, but neck and legs shorter (larger and more plump than Golden Plover). Length:31cm (12 in.).

In winter plumage, grey coloration and, in flight, black axillaries (arm pits) contrasting with white wing-lining diagnostic. Whitish wing-bar, rump and tail are additional clues. Freely utters a loud, plaintive *tloo-oo-ee* whistle.

In winter plumage, upperparts brownish-grey, face and underparts white with brownish-grey streaking down to the belly. At close quarters, narrow brownish barring visible on upper tail-coverts and tail. Adult in summer has upperparts blackish spangled with whitish; face and underparts from chin to lower abdomen jet black. Lower abdomen and vent white; a broad white band divides the black of the face and throat and the paler crown and hindneck. In all seasons bill black, eyes brown, legs blackish or dark grey. Sexes alike.

In August, September and October, and again in March and

April, some individuals show varying amounts of black on the underparts. Affects coastal swamps, estuaries, mud-flats, and sandy sea-shore; rarely found far from salt or brackish water.

HABITS : Usually found in ones and twos or in small groups of 5 or 6 with other shorebirds. Rather sluggish, often seen standing on one leg just resting. While feeding takes short zig-zag runs, stops suddenly to pick up prey (marine worms, molluscs etc) and again runs a few feet and so on. Flight quite swift. On taking wing and in flight utters a loud, plaintive whistle *tloo-oo-ee*.

Breeds on the Arctic tundra of Asia and Europe.

STATUS : Winter visitor to the coastal areas throughout India.

380 INDIAN LITTLE RINGED PLOVER

Charadrius dubius jerdoni (Legge)

Plate III, 7

REFERENCES : *Hbk* **2:**231-4; *Pic.G:*40(3), 41(2); *BOK*:109-10; *PHIB*:462; *Bs.of C:*287; *Sh.Bs:*284, plate 34. For size and description see *BOK:*109.

Salim Ali, in his account of *Charadrius dubius curonicus* (*BOK* pp.109-10) says, "The smaller race *jerdoni* is resident and breeds in India, Ceylon and Burma; doubtless also in Kerala, but so far unrecorded." But the breeding of this subspecies in Kerala had been recorded in *JBNHS* **50:**664 (April 1952) by KKN who had noted its nesting no less than 29 times between April 1943 and June 1951 in various rivers in the Palghat taluk. Nests or adults with chicks were found from November to June. Nests with eggs were found on 20-11-54, (earliest date) and 4 times in December (27-12-1948 C/2; 28-12-'48 C/2; 19-12-'49 C/2 and 20-12-'50 C/1). Between June 1951 and April 1960 nesting was recorded 13 times. March, April and May seemed to be the months when the majority had nests. Although the only nest recorded in November (20th 1954) held 4 eggs, no other nest contained more than 3. The latest date on which a nest was found was 3-6-1951 and it held only 1 egg which hatched about 24 hours later. Nests found in November & December held only 1 or 2 eggs.

In the Palghat Dt., though at least one or two Ringed Plovers were recorded in every month of the year, most of birds disappear when the rivers are inundated and seem to return only around the middle of August. It is not the rain, but the absence of sand and gravel banks on the riverbed that seems to make them go elsewhere. Only very rarely were these birds seen on

grassy banks or in paddy fields.

A.J.Gaston found *C.dubius* common between 3-12-77 and mid-March 78 near Cheruthuruthi "on wet paddy fields, where most of the birds seen were in immature plumage, and also by the river (Bharathappuzha) where most were in adult plumage and holding territories. In the evening, during January and February, a roost of about 200 congregated on sand-flats beside the river and this included both adults and immatures. A nest containing one newly hatched chick and 2 eggs was found close to the river on 26 March". (*JKNHS* 2 p.28, Oct 1979) Gaston does not seem to have attempted subspecific identification. In the light of his own experience and the remarks of HA (*JBNHS* 66:556-7) KKN feels that the birds seen by Gaston in 'immature plumage' in the wet paddy fields could have been of the race *C.d.curonicus* in winter plumage, and those found in adult plumage on the river bed (and nesting) of the race *jerdoni*.

KKN would like to make it clear that he took no specimens and has assumed that the birds he found breeding were *jerdoni* as that subspecies alone is stated by the authorities to breed in India. HA (op. cit.) suggests that there is no evidence that *jerdoni* has a juvenile plumage and thinks that Henry's remarks on p.287 of *Bs of C* may be wrong. Marchant and Prater (*SHOREBIRDS* p.284) say that there is little difference between breeding and non-breeding plumages in *jerdoni*.

Subspecific identification of *jerdoni* and *curonicus* is practically impossible in the field. HA points out (op. cit) that in the hand the smaller bill of *jerdoni* is a more reliable index than wing measurements, a view supported by Marchant and Prater who give the bill measurements as 11-12 mm in *jerdoni* and 12-14 mm in *curonicus*.

MALAYALAM NAME : ആറ്റുമണൽക്കോഴി; *Attumanal Kozhi*.

GENERAL HABITS : See *BOK*: 109-110. The following are from KKN's notebooks:- "The bird's call notes are more varied than the books suggest. The *true-it-true-it-tree-it* or *trew wit - trew wit - trew - wit* seemed to be uttered while flying over the territory or chasing the mate or another bird. Sometimes as many as 4 to 6 would indulge in chasing one another, all of them calling. A bird running at another would utter a series of *treeng*'s or a *treeng* followed by a run of *tree*'s or a run of *twit*'s. Anxiety seemed to be expressed by a series of *treewing*'s or *trweeng*'s. A bird running away in an attempt to draw an intruder away from its territory would utter a *twi-yoop--twoyoop--twiyoop*. This is not an exhaustive list of the bird's vocalisations." On mating, in addition to the two observations included in the *Hbk*, may be added the following: "On 26-9-1949 on the bed of R.Gayathri at Kavassery, two birds were feeding silently around 5 pm. A third Ringed Plover alighted near them and called. One (or both) of the pair chased away the newcomer. After a while one flew round and round over the other, uttering an unusual *tweeko-tweeko-tweeko-trew-wit trew wit-trew wit-tweeko-tweeko-tweeko*. Suddenly it flew down and ran round the other

before jumping on its back and mating. There was little movement, except at the end when the male twisted its vent round and round, raised its wings stiffly and stepped off the other's back. At 5.15pm one of the pair walked into the shallow runnel nearby and bathed twice within a few minutes. Mating was noted again at 5.25pm on 29-9-49 at the same spot, presumably by the same pair."

Whistler has commented on the pugnacity of the Ringed Plover in the breeding season. At Kavassery Ringed Plovers were noted running at and putting to flight Common Sandpipers many times and Whitebreasted Kingfishers sometimes and a Black Drongo once. While Common and Green Sandpipers took fright when a Marsh Harrier flew over the river, the Ringed Plover seemed to ignore the harrier. During a shower adults shelter their unfledged young by taking them under their wings or under fluffed-out breast feathers. (See *JBNHS* **50:**664-5).

"The 'broken-wing' distraction display is put on not only to divert the attention of human intruders but sometimes of other birds also. On 27-11-1954 a bird sitting on a clutch of 4 eggs rose when a King Crow alighted 3 feet away and put on the display. When the drongo flew off, the Ringed Plover displayed before me. However, on 1-12-'54 the same Ringed Plover just left the eggs and ran off when I approached the nest" - KKN.

In view of the doubts expressed by some of the authorities about the immature and non-breeding plumages of this Ringed Plover, the following observations of KKN may be of some interest: Although most of the Ringed Plovers seen on the river bed wore 'adult breeding plumage' I have sometimes come across individuals with no black on head or breast and only a very obscure ring round the eye, or with a distinct gap in the middle of the breast-band (with broken edges much broader than the rest of the breast band), or with black absent only on the forehead but with a normal black collar.

22-12-'51 : R.Gayathri, Kavassery : A normal bird and three 'pale birds' none of which had an orbital ring, but were otherwise similar to those described earlier. (See *NLB* Vol.**32;** Jan-Feb., pp.13-14)

A frequently-seen display not described in the *Hbk* etc. involved groups of 3 and 4 'normal' birds. This often began with 2 birds running round with puffed-out breast feathers, calling loudly. On hearing these calls one, or more often two, would come flying, alight close to the first pair and they would all start running, round, head drawn in, breast feathers puffed out and often tail feathers spread out and bent down. During the mutual chasing, one would suddenly stop and the nearest bird would run towards it and leap over its back and continue running round.

An instance of a bird trying to incubate a dry, broken egg-shell was noted in the morning on 4-4-1950 at Kavassery. 7 hours later, the bird was again seen sitting on this dry shell. There was nothing else in this nest.

389 BLACKTAILED GODWIT

Limosa limosa limosa (Linnaeus)

Plate III, 6

INTRODUCTION : In *BOK* given a brief mention although it had not been recorded in Kerala. It has since been recorded at Matakkara, Kattampalli and appears to be a regular winter visitor at least to the wetlands of North Kerala.

It was first reported by CSK who saw one in the estuary of the Baliapatam river on 27-2-1986 (*JBHNS* **87**:296) and was later found to be a regular winter visitor to Kattampalli and Matakkara. The latest date on which it was noted 15-5-91. PKU and LN (*BLACKBUCK* 1991 VII (1)) say that it was first noted on 13-10-'87 at Kadalundi where they consider it an occasional visitor. However, they had seen 100+ on some occasions. On 20-10-'91 C.Mohankumar saw 12 near the Kayamkulam Bar and 9 at the same place on 29-2-'92.

REFERENCES : *BOK*:114; *Hbk* **2**:249-50; *Pic.G*:39(10), 42(5); *Bs. of C*:298-9.

MALAYALAM NAME : പട്ടവാലൻ ഗോഡ്‌വിറ്റ്; *Pattavalan Godwit.*

DESCRIPTION : Village hen +/- Length M 41cm; F 50cm (16-19 1/2 in) A large sandpiper with a long, straight (or only very slightly upcurved) thin pointed bill and long legs. Uniform sandy-brown above with no black mottling as in No.391. A prominent white wing bar and a single broad black band across the tip of the white tail. In flight the broad white wing bar and the strikingly black and white tail distinguish it from No.391. The main differences between the two Godwits are:

	389 BLACK TAILED	391 BAR TAILED
Upper parts	Uniform sandy-brown or smoky-grey.	Browner with dark streaks on back and wing-coverts.
Bill	More or less straight with basal half orange or reddish.	Upcurved, with basal half yellowish, and distal half blackish. Not as long as Blacktailed's.
Wing	Broad white bar contrasting strongly with the trailing edge.	The whole wing looks dark; no prominent wing-bar.
Tail	Basal half pure white, terminal half black i.e. 'broad black band on pure white tail'.	Tail covered by numerous narrow dark bars; only rump white.
Axillaries	Pure white	Barred and mottled with black.

Blacktailed has longer legs and longer bill than Bartailed. In flight toes and part of the legs of Blacktailed project beyond tail-tip. In flight, seen from above, conspicuous white subterminal bands on trailing edge of black wings, together with white upper tail-coverts of Blacktailed form an open V which is distinctive. Sexes alike. In summer plumage head and front half of body turn bright rufous.

HABITS : More of a freshwater bird than the Bartailed although it resorts to shallow coastal lagoons and esturies also. Wades through shallow water, probing the mud for small aquatic animals, sometimes immersing the whole head. Mixes freely with other waders. In winter it is more or less silent, but sometimes utters "*tuk* or *kek*, often repeated" (*Sh. Bs.*).

NESTING : Breeds in parts of central Europe and Western Asia.

391 BARTAILED GODWIT

Limosa lapponica (Linnaeus)

Plate III, 5

INTRODUCTION : According to *Hbk* a vagrant to areas south of Bombay. First noted in Kerala at Kadalundi on 7-11-1985 by LN. Later, at the same place, six on 15-11-'85, ten on 29-11-'85 and one on 8-12-'85; not seen after 23 December (LN et al.*JBNHS* **86**:459, December 1989). CSK found it to be a regulr winter visitor in small numbers (1 to 8) from September to May at Matakkara. Earliest date 8-9-'91 and latest 2-5-'91 (Matakkara). S.E.Lauritzen saw 5 on 5-11-91 at Kadalundi, feeding and preening on mounds of mud formed by coconut-husk retting.

REFERENCES : *Hbk* **2**:252; *Pic.G.*:39(11) & 42(6); *Bs. of C.*:297.

MALAYALAM NAME : വരവാലൻ ഗോഡ്‌വിറ്റ്; *Varavalan Godwit.*

DESCRIPTION : Size and shape more or less as of 389. For differences see under 389, Blacktailed Godwit.

HABITS : Simialr to those of 389, but seldom seen in fresh water. Prefers the sea coast, tidal creeks and shallow salt pans. LN et al, (op.cit.) say,"Usually... seen resting and preening among other waders, almost always near the waterline and sometimes even in shallow water." " In flight, the neck is drawn in and the long bill pointed somewhat downwards, giving much the silhoutte of a flying snipe." (Henry, *Bs. of C.*). Contact and alarm calls "a barking *kak-kak*, a deep *kirruc*, and variants of these." (*Sh. Bs.*).

BREEDING : Summer, in northern Europe and N.W Asia.

400 TEREK SANDPIPER

Tringa terek (Latham)

INTRODUCTION : [In some old books and some recent ones such as *SHOREBIRDS* and *A FIELD GUIDE TO THE BIRDS OF THE USSR*, the scientific name used is *Xenus cinereus* (Guldenstadt)].

Not included in *BOK* although, according to the VS Report (*JBNHS* **39**:255) Phythian-Adams shot two from a flock at Cannanore on 12-12-1931 and Jerdon saw it once at the edge of the 'Trichur lake'.

HA (*JBNHS* **67**:55) lists 1 specimen from Cannanore in BNHS collection and says that someone at the BNHS had thought that Cannanore was in the Nilgiris.

Not recorded in Kerala between 1931 and 1968. On 24-11-1968 KKN met with two at the mouth of the Dharmadam river c. 4.5km N of Tellicherry (*JBNHS* **66**:623). One of these had a broken right leg. On 2-12-79 KKN and Suresh Elamon saw 1 in the company of a flock of sandplovers at Perumathura and noted that on taking wing it uttered a "low, musical triple whistle *plee-plee-plee*". CSK saw the Terek Sandpiper regularly every winter from 9-8-86 to 6-12-'91, once singly at other times in groups of 5 to 15 at Matakkara and Nambram Madu. Jafer Palot saw 18 at Madayippara on 11-8-86. On 8-3-'92 P.K.Raveendran saw 4 in the Purathur estuary. These records suggest that the Terek Sandpiper is a regular winter visitor to some places in North Kerala and perhaps only a vagrant to South Kerala.

REFERENCES :*Hbk* **2**:269; *Pic.G*:43(7) & 44(14); *Bs.of C*:302.

MALAYALAM NAME : ടെറക് മണലൂതി; *Terek Manaloothi.*

DESCRIPTION : Size : Common Sandpiper; length c 24cm (9 1/2 in.) The combination of the long slender upcurved bill and the rather short orange-red legs is distinctive. Upperparts uniform pale smoky-grey. May show a blackish shoulder patch. Bill blackish with basal one-third reddish or orange-yellow. In flight pale ashy-brown rump and white trailing edge of dark wings conspicuous. In winter plumage greyish-brown above with conspicuous white forehead and supercilia. Below white. Sexes alike. Winter visitor.

HABITS : Affects seashore, mangrove swamps, coastal lagoons, tidal creeks and mudflats, generally singly, in pairs, or small parties. Runs about very actively, feeding on the damp beach or on mud-flats in the company of other waders. Often thrusts entire bill into the sand and mud to probe for small animals. Frequently washes its prey before swallowing.

At Point Calimere a call often heard by KKN was a loud double whistle *kweee-whi-kweee-whi.FG BBE* describes voice as 'a fluty *dudududu*, or a loud piping twitter; *Sh.Bs.* as 'a sharp fluty *twit-wit-wit-wit*' in flight.'

407 SWINHOE'S SNIPE

Gallinago megala Swinhoe

INTRODUCTION : Included here on the strength of (1) H.R.Baker's statement (*Bs.of S.I.*:419) that Phythian-Adams sent him the tail of Swinhoe's Snipe shot at Cannanore in the second week of September 1927 and that Phythian-Adams had shot 2 on that day, 2 in 1925 and one in 1926. (2) Whistler's statement (*JBNHS* **39**:263) that Phythian-Adams had killed 15 at Cannanore between 1925 and 1935 and that he sent Whistler the skins of two shot in 1935. Phythian-Adams had found this snipe at Cannanore from September of one year to February of the next.

REFERENCES : *Hbk* **2**:284-5; *Pic.G.*:106(2).

MALAYALAM NAME : സ്വിൻഹോ സ്നൈപ്പ്; *Swinhoe's Snipe.*

DESCRIPTION : Snipes are extremely difficult to identify in the field and it is impossible to tell a Swinhoe's Snipe from a Pintail Snipe. Therefore no description is given here. Swinhoe's Snipe is of the same size as the Common Sandpiper; length, including bill, c 29cm (11in); bill 6-7cm.

HABITS : Same as of Pintail Snipe and Fantail Snipe (See pp.121 and 122 *BOK*).

STATUS : Winter visitor. Not common.

HABITAT : Marshy shores of lakes, backwaters and paddy fields.

413 EASTERN KNOT

Calidris tenuirostris (Horsfield)

INTRODUCTION : CSK and C.Jayakumar saw 3 at Matakkara on 28-11-1986. PKU and LN (*BLACKBUCK* 1991 VII(1)) noted it first at Kadalundi on 10-10-'87 and found it on every subsequent visit till 27-12-'87. The largest number seen by them was 12. S.E.Lauritzen saw one on Kappad beach feeding in a mixed flock of Sandplovers, Turnstones etc. Winter visitor.

REFERENCES : *Hbk* **2**:297-8; *Pic.G.*:40(12), 41(11); *Bs. of C.*:313; *Bs. of Sn.Ind.*:405-6; *Sh.Bs.*:364; *FGBSEA.*:139-40.

MALAYALAM NAME : കിഴക്കൻ നട്ട്; *Kizhakkan knot.*

DESCRIPTION : A chunky, short-legged sandpiper larger than Curlew Sandpiper and Dunlin. Length c. 29cm (11 1/2 in.). Long black bill very

slightly decurved at the tip. Dark eye-streak and indistinct whitish supercilium. Above, light brownish grey, boldly streaked with black. Lower back, rump and upper tail-coverts dark brown with white scale marks. Below, white with foreneck and upper breast streaked or spotted with dark brown. Sexes alike. "Upper breast and flanks dark-spotted. White upper tail-coverts contrast with dark tail and upperparts." (*FG B SEA*). "Dense dark spots on breast and sides. Holds body more horizontally than other sandpipers." (*FGB USSR*).

Call variously described as "a low *chucker-chucker-chucker*" (*FG BSEA*), 'a whistling *pyuee*' (*FG BJ*), 'a soft whistling' (*FG B USSR*). The name Knot is derived from the call of the Red Knot (*Calidris canuta*) which is a low *nut*.

HABITS : More or less the same as those of the smaller sandpipers such as the Dunlin. Affects large sandy or muddy estuaries and coasts where large expanses of mud are uncovered at low tide. Feeds by probing rather than pecking.

Note :- The Red or Great Knot (*Calidris canuta*) has been recorded at Point Calimere and in Ceylon. The main differences are:

412 GREAT (RED) KNOT	413 E KNOT
1. Length (total) 25cm (10 in)	29cm (11 1/2 in)
2. Length of bill 29-38mm	39-47mm
3. Crown and nape plain grey	Distinctly streaked with dark grey.
4. Upper tail-coverts barred black and white	White upper tail-coverts contrast more with dark tail and rest of upperparts.

414 SANDERLING

Calidris alba (Pallas)

INTRODUCTION : See *BOK* p.126. KKN saw three amidst a flock of sandplovers on the beach at Dharmadam on 24-11-1968; and on 21-12-'68 four at the same place with sandplovers. (*JBNHS* **67**:570). With K.V.Sreenivasan and Suresh Elamon he saw a flock if 45+ at Poovar on 15-10-'78; 2 flocks of c 35 each near the sandbar of Muthalappoozhi at Perumathura on 11-2-'79. LN and PKU found it common in the Kadalundi estuary every winter from 1985 to 1988, always in large flocks of which one was 300 strong (*BLACKBUCK* VII(1) 1991).

On the Sanderling in Cannanore, CSK remarks, "Regular winter visitor, usually in flocks of about 20, at Cannanore and Azhikode beaches. The

largest flock seen was of about 100. Latest date 2 May (in 1986)."

REFERENCES : *Hbk* 2 : 298-9; *Pic.G* : 40(19), 41(5); *Sh.Bs.* : 365; *FGBSEA*:142.

MALAYALAM NAME : തിരക്കാട; *Thirakkada.*

DESCRIPTION : Size: Lesser Sandplover, with longer, thinner bill. Length : 19cm (7 1/2 in.) Easy to distinguish in winter from other coastal waders by its whitish coloration, slender, straight black bill, thin black legs and very fast running. "Chases waves back and forth on the seashore."-(*Hbk*) "Extremely active..races after the retreating waves." (*FGBBE*). Has a black shoulder patch which is not always as conspicuous as most authors suggest, but is a good fieldmark when visible.

In flight the whitish plumage, very conspicuous white wing-bar contrasting strongly with the black wrist-patch and black trailing edge of the wing are distinctive. Call: A shrill *wik-wik* or *twik* in flight.

In breeding plumage chestnut mottled with black above, pure white below.

HABITS : Feeds in the company of other small shorebirds at the edge of the surf on the beach. Easily distinguished by its "whitish coloration and ceaseless activity, running swiftly on a blur of twinkling legs after each receding wave to pick up any titbits it may cast ashore, and hurriedly retreating before the oncoming next."-(*Hbk*)

BREEDING : On the Arctic tundra. Holarctic.

417 TEMMINCK'S STINT

Calidris temminckii (Leisler)

INTRODUCTION : See *BOK* p.126. First recorded reliably in Kerala by A.J.Gaston at Cheruthuruthy c.10°25'N X 76°16'E during his stay there from 3-12-'77 to 18-2-'78. In his paper 'Birds observed at Cheruthuruthy' in Vol.2 (1979) of the *JKNHS*, he states that this species was somewhat more numerous than the Little Stint, and adds: "Up to six recorded by the river (Bharatappuzha) and also seen in ones and twos in paddy fields usually in company with *Charadrius* spp. One bird with a broken wing was collected to confirm identification."

LN, PKU and RV in their note "Four additions to the Birds of Kerala" (*JBNHS* **86**:458-9) say that this stint was definitely identified at the Kadalundi estuary 19-1-'86 and was seen there till 5-4-'86.

P.K.Raveendran found it in the 'Kole' fields of Trichur in the winter of '91-92.

REFERENCES : *Hbk* 2:303-5; *PHIB*:472; *Sh. Bs*:370.

MALAYALAM NAME : ടെമ്മിങ്കി മണലൂതി; *Temminki manaloothi.*

DESCRIPTION : Marchant et al (*Sh.Bs.*) say: "This is the most distinctive of the seven small calidrids, both in appearance and in calls." They describe the call as "a distinctive, rapid, cricket-like *tiriririrr* often repeated". Sexes alike. Uniformly dark grey back and breast, pale legs (yellowish, greenish or yellowish-brown, not black) and pure white outer tail feathers are clues to identity.

STATUS & HABITS : Winter visitor. *Hbk* points out that it is found on the seacoast as well as at inland jheels, marshes (and rivers). May crouch when approached and 'tower' (rapidly gain height by zig-zag flight) when flushed.

420 DUNLIN

Calidris alpina (Linnaeus)

INTRODUCTION : Salim Ali did not come across the Dunlin in Kerala. LN, PKU, and RV state (in *JBNHS* **86**:459) that 20 to 30 Dunlins were regularly seen between 7-11-1985 and 27-3-'86 at the Kadalundi estuary. They were seen feeding in the company of other small waders, often side by side with the Curlew Sandpiper.

PKU and LN say (*BLACKBUCK* VII(1) 1991) that since November 1985 twenty to thirty Dunlins have been regularly seen at Kadalundi every winter. CSK and CJ first identified the Dunlin at Matakkara on 21-11-1986 and have found it to be a regular winter visitor to Matakkara in small number s(1-5). On 10-10-'91 CSK saw one in breeding plumage at Matakkara.

REFERENCES : *Hbk* 2:308-10; *Pic.G*:40(14),41(6); *FGBBE*:131; *Sh.Bs.*:380.

MALAYALAM NAME : ഡൺലിൻ മണലൂതി; *Dunlin manaloothi.*

DESCRIPTION : As Salim Ali has pointed out in *BOK* (p.127) in winter plumage it is "confusingly like the Curlew-Stint (Curlew-Sandpiper) in size and plumage, but in flight its blackish upper tail-coverts (as against white in the other) are always diagnostic." The Dunlin's rump has a dark centre; that of the Curlew-Sandpiper is completely white and conspicuous in flight. The Curlew-Sandpiper's bill is longer, more slender, distinctly and evenly decurved; that of the Dunlin is shorter and only slightly downcurved at the tip. The Dunlin's breast is darker than the other's. The call of the Dunlin is a harsh, nasal *treer* or *treep;* the Curlew-Sandpiper's is a more pleasing soft

chirrip. The Dunlin is slightly smaller and has shorter legs than the Curlew-Sandpiper.

In summer plumage the Curlew-Sandpiper has head, neck and undeparts bright rufous and no black patch on the belly; summer Dunlin is whitish below with a large black patch on the belly.

HABITS : But for the fact that it has a hunched-up look while feeding, its habits are very similar to those of the Curlew-Sandpiper and other small waders.

BREEDING : Nests all along the northern edge of the Eurasian continent.

423 SPOONBILLED SANDPIPER

Eurynorhynchus pygmaeus (Linnaeus)

Plate III, 8

INTRODUCTION : The only record from the West coast of the Peninsula is of one seen at Kadalundi estuary by LN and PKU (*BLACKBUCK* VIII(1) 1991). A highly endangered species whose world population is believed to the less than 2800 pairs, it is included in the *Red Data Book*. Breeds in NE Siberia.

REFERENCES : *Hbk* **2**:313-4; *Pic.G*:40(18); *Sh.Bs*.:382.

MALAYALAM NAME : കരണ്ടിക്കൊക്കൻ മണലൂതി; *Karandikkokkan manaloothi*.

DESCRIPTION : Length: c.17cm (6 1/2 in.). Small, sparrow-sized wader. In winter plumage, streaky greyish-brown above (including crown); supercilium and underparts white but for sides of neck and upper breast which are lightly streaked grey-brown. Hindneck paler than crown and back. Wing-coverts grey with narrow white fringes. Rump and upper tail-coverts dark brown in the middle, pale grey at sides. Bill and legs black. Sexes alike.

The extraordinary bill of this small sandpiper is unique and causes the bird to feed in a distinctive fashion. Wading in shallow water or squelchy mud, the bird swings its bill from side to side instead of pecking or probing.

The bill is broad at the base, tapering towards the tip which is flat, very broad, square, and paddle-like. But in the field this "spoon" is not always evident in profile. The bird is liable to be mistaken for a Little Stint. Call a quiet *prreep* or shrill *wheet*.

STATUS : Very rare winter visitor. Breeds in NE Siberia. Included in the ICBP *Red Data Book.*

426 RUFF

Philomachus pugnax (Linnaeus)

INTRODUCTION : *BOK* p.128. In his brief note on this bird SA remarks that it is "more than likely to occur occasionally' in Kerala and gives some identification clues.

On 16-12-'77 and 27-1-'78 A.J.Gaston came across single birds on paddy fields at Cheruthuruthy. (*JKNHS,* Vol.**2**, 1979; p.28)

REFERENCES : *Hbk* **2**:318-21; *Sh.Bs.*:386; *FG B BE:*133.

MALAYALAM NAME : ബഹുവർണ്ണൻ മണലൂതി; *Bahuvarnan manaloothi.*

DESCRIPTION : Relatively large and long-legged sandpiper in which females ('Reeves') are much smaller than males ('Ruffs'). Name Ruff derives from long, loose, erectile feathers developed on neck and breast by breeding males. (Used in spectacular lek displays, these feathers and ear-tufts are remarkably variable in colortion and patterns). In winter plumage both sexes generally resemble the Redshank (*Hbk* Nos.393, 394) but have shorter, slightly downcurved bills. In flight conspicuous white oval patches on either side of and near base of tail are a good clue to identity. In winter both sexes have prominent scaly pattern on back as all feathers are dark with whitish fringes. Colour of bill and legs highly variable.

STATUS & HABITS : Winter visitor. Gregarious. Haunts coastal pools, swamps and inland water. Feeding behaviour similar to Redshank's. Said to be very silent. Occasionally, on flushing, utters a low *chuk-chuk* or plaintive *tu-whit.*(*Hbk*)

[At Point Calimere (Kodikkarai, Tanjore Dist.) KKN first met with the Ruff on 25-6-'80. In a flock of 30, five were evidently males. Two had hackles on hind neck and long, loose feathers on breast. Males ran at each other and sparred. Of 17 seen together on 17th July, only two were grey and dull-looking; one was very white on head, neck, mantle, breast and belly; the others had all dissimilar plumages. An expert trapper remarked that legs of different colours were a special feature of this species. Its local name, 'Vara-chirahi', meaning bird with streaked wings, is quite apt.]

430 BLACKWINGED STILT

Himantopus himantopus himantopus (Linnaeus).

Plate III,3

INTRODUCTION : In December 1968 a resident of Payangadi (Cannanore Dt.) told KKN that black and white birds with enormously long reddish legs were regularly seen at Madayi in winter. On 5-2-'70 on his way to Kasaragod from Dharmadam by an express train KKN had a glimpse of some Stilts feeding in a marshy area near Ezhimala. The first definite sighting of the stilt in Kerala was by Suresh Elamon on 18-2-1979 at the edge of the Vellayini lake (Trivandrum). The next day SE and KKN saw 9 birds at that spot (*JBNHS* 77:510). On 27-1-1980 SE and KKN saw 20+ at the same place. At 08.15 on that day most of th birds were resting, standing on one leg.

After that fairly large groups of stilts were noted by KKN and others between November and May at various places between Ernakulam and Trivandrum, mostly in flooded paddy fields. Jafer Palot saw 22+ at Payangadi c.14km NW of Cannanore on 3-10-'80 and later at Ezhome and Chemballikundu. C.Jayakumar saw a flock of c.50 at Chemballikundu in 1979. A.P.Jairaj told KKN that in June 1988 he saw 100+ in the Kole fields near Trichur. CSK saw the Stilt from October to May at Kattampalli in 1981 and subsequent years in groups of 8 to 50. Earliest date 8-9-1991; latest date 24-5-1991.

REFERENCES : *Hbk* 2:329-31; *Pic.G.*:39(8),42(8); *PHIB.*:464-5; *Bs.of C.*:292-3; *Sh. Bs.*:232.

MALAYALAM NAME : പവിഴക്കാലി; *Pavizhakkali.*

DESCRIPTION : Size: Redwattled Lapwing + Length 35-40cm (14 1/2 in.) and according to *FGBBE* and *FGB SEA* 15 in. The *Hbk*'s 25cm (10 in) seems to be a misprint.

Extraordinarily long pink legs, black or blackish upperparts, pure white head, neck and underparts, with the long, straight, thin, black bill make it unmistakable. (Note that in both male and female the crown and hindneck may show varying extents of black or brown at any time of the year).

In flight the white of the rump runs up the back in a long narrow wedge. Underwings fully black ,contrasting with pure white body and tail. Pink legs extend far beyond the tail-tip. Male's upper back (mantle) and wings are always glistening black; crown and nape may be white, black, or white mixed with some black. Winter male and female at all times may show a little black on crown or nape. Female's mantle and wing said to be brownish ("hair brown") in all seasons. In *JBNHS* 67:287 HA points out that some females have 'blackish' metallic green on the upperparts.

HABITS : Found in small groups or flocks of 100+ wading in shallow water in marshes (both fresh water and tidal), reservoirs, tanks, salt-pans

inundated paddy fields etc. Walks "deliberately lifting its legs clear of the water at each stride, and pecks hither and thither at the small aquatic creatures which form its food." (*Bs of C.*). Often feeds with head fully submerged. Call: A shrill *kip-kip-kip* or *kyip-kyip-kyip* in flight (*Hbk*) "A short bark, *kek*, a high-pitched *kikikikiki* and a yelping *kee-ek.*"(*Sh.Bs.*)

BREEDING : Nests between April and August in many parts of India, but not recorded in Kerala.

432 AVOCET

Recurvirostra avosetta Linnaeus

Plate III,1

INTRODUCTION : "Not recorded in Kerala"-*Hbk*. On 28-11-1986 LN spotted a single Avocet among gulls and terns on a mudflat in the Kadalundi Estuary. (*JBNHS* **86**:447). The bird was seen there again on 30-11-86 (*BLACKBUCK* VII(1) 1991). CSK saw one at Matakkara on 23-11-1987. S.E.Lauritzen in 1991 saw c.10 on 2-10 and 9 on 5-11 at Kadalundi and 6 on 19-10 on Wellington Island (Cochin). On each occasion they were feeding in shallow water.

REFERENCES : *Hbk* 2 : 332 - 4; *Pic.G :* 39 (6), 42(10); *Sh.Bs.*: 235; *FGBBE:*136.

MALAYALAM NAME : അവോസെറ്റ്; *Avocet.*

DESCRIPTION : Size Partridge +; length c 46cm (18 in.). A handsome black and white marsh bird with a unique upcurved bill which is thin and black. Rather long blue legs. Sexes alike. Plumage more or less the same throughout the year. Snow-white all over but for the following black markings: a 'cap' that comes down to just below the eyes; nape and hindneck; wing-tip (the greater part of the primaries); a broad band through the wing-coverts, joining when the wing is closed, with a similar broad band on each side of the back. (Adapted from *Bs. of C.*)

HABITS : Found in pairs and parties (sometimes 100 +) on mudflats and shallow water in swamps, lagoons, estuaries and sea-coast. Feeds on slushy ground or wading in shallow water, skimming the surface with its upturned bill "which is held like a hockey stick held in play" and swung from side to side or moved in circles to churn the mud. Often swims and 'up-ends' as dabbling ducks do. Feeds on tiny aquatic creatures. In flight repeats a high-pitched *klooit* many times.

BREEDING : Nearest breeding place is Kutch (Gujrat).

434 CRAB PLOVER

Dromas ardeola Paykull.

Plate III,2

INTRODUCTION : First recorded in Kerala by KKN, KVS and SE (*JBNHS* 77:508). They saw an immature bird at Perumathura (c 29km north of Trivandrum) on 11-12-1979. It was resting on damp sand close to the surf, often squatting with underparts pressed to the sand or sitting on its tarsi with the legs folded forwards. Though many crabs ran about all around it, the bird made no attempt to catch any. This bird was found at the same place on 23-2-79 but was not seen on 8 April. CSK saw 2 adults on 16-10-'88, 2 adults on 8-11-'88 and 1 adult and 2 immature birds on 22nd and 23rd December 1990 at Matakkara. The earliest date on which a Crab Plover was seen in that area was 8-9-'91 at Matakkara. PON saw 2 on the beach near the Puduvyppu Mangrove forests c 15km from Cochin. The birds were there from 13th to 17th of January,1990.

REFERENCES : *Hbk* **2**:337-8; *Pic.G.*:39(7),42(9); *Bs.of C.*:275-7; *Sh.Bs.*:222.

MALAYALAM NAME : ഞണ്ടുണ്ണി; *Njandunni.*

DESCRIPTION : Length c.41 cm(16 in.). A dumpy, partridge-sized shorebird with black and white plumage, black, large, tern-like bill and long bluish legs.

The body is mostly pure white, with black only on the back and the wings. A small black patch round the large, brown eye. Its most arresting feature is the thick straight, pointed jet-black bill. Sexes alike. Immature birds have back and tail brownish grey and the crown streaked with brown.

HABITS : Found singly or in small parties on the banks of estuaries, brackish lagoons and the seashore. Can run, swim and fly well. Flight reminiscent of terns. Said to be largely crepuscular. Main food crabs, caught on the seashore or while wading in the shallows of salt-swamps and the edges of estuaries. Call 'a falsetto *ka*, usually repeated rapidly' (*Sh.Bs.*). CSK noted that when closely approached, it uttered a low *kreek-kreek* several times.

BREEDING : Nests in the islands of the Persian Gulf. Breeding habits quite unlike those of other shorebirds and similar to those of bee-eaters and kingfishers. Digs a long tunnel (or enlarges an old crab-hole) in a sandbank and lays a single white egg in the chamber at the end of the tunnel.

In his letter dt.1-10'91 to KKN, CSK says, "according to *SHOREBIRDS* usually family groups consist of 2 adults and an immature bird. But at Matakkara 2 immature birds are seen together. Last year one adult and 2 immature birds formed a group." D.N.Kurup found that one individual

"spent an entire winter in the Kadalundi estuary (Unpub. P[illegible] Thesis,1991).

437 GREAT STONE PLOVER

Esacus magnirostris recurvirostris (Cuvier)

INTRODUCTION : PON saw one every day from the 13th to 17th of January 1990 on the beach close to the Puduvyppu mangrove forests 12-15 km from Cochin. PKU and LN mention (in *BLACKBUCK* VII(1)) an 'unconfirmed sight record' of one in the Kadalundi estuary, but give no date or other details.

REFERENCES : *Hbk* **3**:5-6; *Pic.G.*39(15),42(12).

MALAYALAM NAME : പെരുംകൊക്കൻ പ്ലവർ; *Perumkokkan Plover.*

DESCRIPTION : Size: Domestic hen. Length c 51cm (20 in). A long-legged, thick-headed plover with a massive slightly upcurved tern-like bill, enormous yellow-eyes with 'spectacle-mark' around them and a striking black and white head pattern. Uniform greyish sandy above, white below. Bill black with yellow base. Legs and feet greenish grey. In flight arched profile of the back and a large white patch on the black wing-quills are additional clues.

Normally found on the rocky beds of large rivers, but sometimes also on sea-beaches, tidal estuaries and salt pans.

HABITS : Behaviour very like that of the Stone Curlew but instead of freezing when approached, flies off (*BOK* p.129). Usually in pairs or parties of 4 or 5, rarely in flocks of upto 20. Crepuscular and nocturnal as a rule. Spends most of the day resting on rocks or bunds out in the open. Runs very fast and sometimes swims. Feeds on crabs, and molluscs which it often finds by levering up large stones with its huge bill. Bobs head up and down as some kingfishers do. Call:a series of loud creaking notes; alarm call "a clear, shrill rather plaintive whistle *cheep--cheep--cheep cheep cheep* which carries a long way."-(*Bs of C.*) 'A loud harsh *see-eek*' - (*Sh.Bs.*)

BREEDING : No Kerala records. Season February to June. Lays 2 eggs in a shallow scrape in sand; sometimes even on bare rock.

STATUS : Resident with local movements?

443 LARGE INDIAN (ORIENTAL, COLLARED) PRATINCOLE (SWALLOW PLOVER)

Glareola pratincola maldivarum J.R.Forster

Plate I, 6

INTRODUCTION : Not recorded in Kerala till 28th April 1984 when CSK found a group of 8 in a wetland c 10km NE of Cannanore. (*JBNHS* **87**:296) and after that regularly every year. Moreover, on 15-5-'91 CSK found the bird nesting at the same place. He and JP saw a bird incubating 2 eggs in the nest made in a dry abandoned paddy field on an islet 4 to 5 acres in extent at Kattampalli. Three more birds were also seen at the same place. On 24-5-'91 CSK found yet another nest with 2 eggs and took some photographs of the birds and the nest with eggs. This nest was also amidst grass stubbles and had a mass of dry cowdung at its edge. During the 3 hours he spent there he found some 25 Collared Pratincoles on the islet and from the birds' behaviour concluded that there could have been at least 10pairs nesting there at that time. At the nest he photographed, the male put on a distraction display, calling, quivering its wings and doing mock-brooding (squatting with body pressed to the ground). On 4-4-'92 P.K.Raveendran saw a single bird (subsp.uncertain) in the Biyyam 'Kole' lands (Malappuram Dist.). On 18-4-'92 CSK saw eleven birds at Kattampalli and found a nest containing 2 eggs. On 25th April he went with his son Siddharth to the same place and discovered 7 nests, 5 in one field and 2 in an adjacent one. One nest held 3 eggs; the rest 2 each. While some of the incubating birds just flew off, others did 'mock-brooding' after leaving their nests. On 2-5-'92 CSK and Siddharth found a total of 9 nests (including the 7 seen on 25 April). Of the two newly discovered nests one held 3 eggs, the other 2. They also found a chick, clothed in greyish down, hiding in a patch of grass. On 6 May they discovered one more nest making the total ten. The chick found on 2 May was in the same patch of grass where it was first seen; it had grown in size but was still covered with greyish down. It's eyes were black. On 28 May they found that most of the eggs in the 10 nests they had seen on 6-5-'92 had hatched, though some nests still contained one or two eggs, probably abandoned. They saw 2 juveniles and three more nests in each of which an adult bird was brooding.Thus a total number of 13 nests had been found at that place in May '92. By the 28th of May the number of adults had increased and on that day was around 45. CSK summed up his observations thus: "Breeding visitor to Kattampalli; found there from the third week of March to the end of June; upto 45 birds, mostly adults in breeding plumage. They are of the race *maldivarum* as evidenced by the wholly black secondaries." JP found it roosting with other plovers on Madayi Rocks.

REFERENCES :*Hbk* **3**:14-15; *Pic.G*:38(4),44(3); *Sh.Bs*:255; *Bs.of C*:273.

MALAYALAM NAME : വലിയ മീവൽക്കാട; *Valiya meevalkkata.*

DESCRIPTION : Myna, but slimmer. Length c 24cm (9 1/2 in).

Short legged swallow-like bird with olive-brown upper parts and black wing-quills. Light yellow (buff) chin and throat with a necklace-like black border. 'Lores black, continued under eye as a narrow black band or gorget looping round throat patch... (reminiscent of Grey Prtridge)' (*Hbk*). Upper breast and sides of body brownish; abdomen and under tail-coverts white. Underwings black with chestnut wing-lining. Tail black, rump white. Short, slightly downcurved black bill with reddish base. Very short black legs. In flight long pointed tern like wings, chestnut wing-lining and white rump are good clues to identity. *G.p.maldivarum* has a shorter, less deeply forked tail and wholly black secondaries. Call: in flight, a constantly repeated *kirri kirri*. Young birds lack the black gorget.

Separation of *pratincola* and *maldivarum* in the field is difficult. Some authors treat *pratincola* and *maldivarum* as distinct species.

HABITS : Gregarious. Feed most actively mornings and evenings, flying very fast and indulging in a variety of acrobatics, chasing flying insects. During the day rest on the ground, squatting or standing. 'Affects dried-up flood plains by large rivers, tidal mudflats and marshes, paddy stubbles in coastal areas, ploughed and fallow fields, open grazing grounds etc.' - Salim Ali.

BREEDING : See the first paragraph.

450, 451 HERRING GULLS

450 *Larus argentatus heuglini* Bree **YELLOWLEGGED HERRING GULL.**

451 *L.a. mongolicus* Sushkin **PINKLEGGED HERRING GULL.**

INTRODUCTION : CSK has reported that 2 to 5 Herring Gulls were seen on the coast at Mattool on 25th October, 5th and 13th December in 1987, and on 25th February and 14th January 1990. These gulls rarely visited the mudflats at Matakkara. The birds seen in October were in summer plumage (pure white heads), but those seen later in December and January were in winter plumage (heads streaked brown). P.K.Raveendran of Avinisseri, Trichur, found some at Purathoor and was able to examine a disabled bird. He identified it as Herring Gull using the *PICTORIAL GUIDE*.

Both 450 and 451 may occur in Kerala as winter visitors; 450 "rarely" (*SYNOP 2*). As even museum specimens are liable for misidentification (See HA:*JBNHS* **67**:292 under No.451) sight records are unreliable.

REFERENCES :*Hbk* 3:26-28;*Pic.G*:45(8).

MALAYALAM NAME : Nil.

DESCRIPTION : Domestic duck +/-. Length c 60 cm (23 in.) Larger than Brownheaded (No.454) and Blackheaded (No.455). Pure white with grey mantle and wings (In winter plumage head and hindneck streaked with brown); black wingtips with a white spot (sometimes two) contrast strongly with the rest of the wing. Bill bright yellow with a red-spot near tip of lower mandible. In flight leading and trailing edges of wings white. Wing quills black with one or more small white 'mirrors' near tip.

Iris white to yellow; narrow vermilion ring round eye. Legs and feet yellow in 450 and pink (but sometimes yellow) in 451.

Call: A strident *kyow* or *kee-ow* and various other notes.

Immature: Above, dark brown flecked with whitish; more buffy on the wings. Below, white mottled and streaked with pale brown. Tail brown, tipped with white. Legs and feet dull yellowish-pink.

Habitat: Seacoast, rivers and lakes.

463 RIVER TERN

Sterna aurantia J.E.Gray

Plate II, 6

INTRODUCTION : SA did not come across it in Kerala and did not include it in *BOK*. The first published report of the occurrence of the River Tern in Kerala was that of A.J.Gaston in the *JKNHS* (p.28 of Vol II, October 1979). During a 47-day sojourn from 3-12-1977 at Cheruthuruthi (near Shoranur) he saw "one over the river on 17 and another on 23 January (1978)."

From April 1944 to October 1953 KKN used to see small numbers of terns in the Gayathri river at Kavassery when he came home for the Christmas and summer vacations. During the Michaelmas holidays in September he never saw any terns there, but during the Christmas holidays (December) and in April and May during summer holidays he used to see the terns more or less regularly. Some of these were River Terns and some 'blackbellied' (which probably included both *S.acuticauda* and *C.hybrida*.). In May 1950, on the 12th he saw 2 and on the 14th three River Terns flying to and fro over village tanks looking for fish. In the light of later experience he believes that they were nesting somewhere in the area and looking for small fishes to feed their young.

On 16-2-1987 KKN saw some River Terns apparently nesting (incubating eggs) on an islet close to the dam in the Malampuzha reservoir. On 1-6-'88

he saw on a similar islet in the Mangalam Dam reservoir a number of disused nests containing halves and fragments of egg-shells and a large juvenile (unfledged) hiding in the herbage. Adults flew round, calling frantically (*JBNHS* **87**:144-5). At both places the terns were in the company of large numbers of Small Swallow-Plovers (*Glareola lactea*).

In March, April and May birds nesting in the Mangalam Dam often flew more than 10km to catch small fishes from village tanks and the Gayathri river in Kavassery. For 6 consecutive days from 3-3-'87 a pair used to arrive at a tank next to KKN's house at 6am or earlier. Calling constantly, they flew back and forth over the water, now and then plummeting down to snatch up a tiny fish without actually plunging into the water. After swallowing one or two, they flew off to the SW holding a 1 $^1/_2$ - 2 inch fish across the bill. Till about 7 am they went to and fro between the tank and the breeding place a number of times.

A pair visited the tank again in the morning on 25 and 26 March, 15, 17, 18 and 28 May. (There were 3 birds on the 17th May). On 24th and 27th May 2 came in the evening; and 2 at noon on the 28th. (On nesting terns going to distant ponds to catch tiny fishes see *JBNHS* **51**:740). Reports of River Terns being found in 1987,'88,'89 and '90 in the Mangalam and Peechi (c 23 km E of Trichur town) reservoirs were received from K.K.Jamal, PON, Anil Zacharia, A.V.Santhoshkumar, V.K.Sudheer, Sanjeev Peters and Z.Ali Jerrish. On 12-10-91 CSK saw a single River Tern flying near the regulator at Kattampalli. Its bill was black-tipped. This tern had not been noted at Kattampalli earlier. CSK points out that after the monsoon showers till about January, the water in the swamp is more or less fresh. During a bird survey at the Sungam Range of the Parambikulam WL Sanctuary (21-25 Dec. 1992), CSK, P.K. Ravindran, C.K.Sujithkumar and others saw about 6 River Terns feeding in the Thoonakadavu and Peruvarippallam reservoirs.

On 27-5-90 on an islet near the dam in the Malampuzha reservoir PON saw a newly made scrape which he thought had been made by a River Tern. Miscellaneous: On 3-3-1987, for some mysterious reason, a Blue Rock Pigeon spent some minutes flying after one of the terns as it criss-crossed over the tank (KKN).

REFERENCES : *Hbk* **3**:48-9; *Pic.G*:46(9); *PHIB*:484-5; *BIB*:52.

MALAYALAM NAME : പുഴ ആള; *Puzha āla.*

DESCRIPTION : House Crow +/-; length (38-46cm) (15-18 in.) A graceful grey and white tern with long pointed wings, a long, rather stout yellow bill, deeply forked tail and red or orange feet. A black 'cap' in summer, replaced in winter by blackish specks and streaks. Invariably over or close to water. Sexes alike. In all seasons upper plumage soft bluish-grey, paler on rump and tail. Underparts greyish-white. In summer plumage crown (including forehead) sides of the head down to below the eyes and nape glossy jet black with a white streak under each eye. In winter crown and nape white with blackish speckling and streaks. Iris brown, bill deep yellow in summer;

duller yellow with a dark tip in winter. Affects large rivers, estuaries, reservoirs and tanks.

HABITS : Essentially a river bird found generally in small noisy parties, flying with a rather jerky flight 20-30 feet above the water, dropping from time to time straight into the water to capture fish. The prey is eaten on the wing after turning it round so that it can be swallowed head foremost. Usually found in the company of other river-loving terns; at breeding places with Small Swallow-Plovers and often Blackbellied Terns also. Flocks rest and roost on sandbanks, facing the wind.

VOICE : The *Hbk* says "not specifically recorded". The terns KKN saw in the Malampuzha Reservoir on 16-2-87 uttered a large variety of calls among which were *kirivi-kirivi-kirivi-; kkikee-kkikee; kwik-keekwik-kee; kkek kekke; kwey-kik-kwey-kik; kwey-ye kewy-ye; trooi-trooi;* and when attacking crows and kites, a loud, harsh *klirr-klirr*. While flying over a village tank looking for small fishes, they constantly repeated a *kwey-kik, kirikik-kirikik* (usually in twos) *keewik keewik; kiyiyu kiyiyu kiyiyu* and *kew-kew-kew*. All these notes were loud and shrill.

STATUS : Resident with local movements.

467 WHITECHEEKED TERN

Sterna repressa Hartert

INTRODUCTION : There do not seem to be any published records of this purely pelagic tern from the Kerala coast. But Baker and Inglis (*Bs. of S.India p.*308) say, without reference to any records, "large flocks appear on the Malabar Coast at times." Although 'Malabar coast' was used very loosely by the 19th century authors (and perhaps even by Peters who is quoted in the *Hbk*), wind-blown individuals of this species may turn up occasionally on the Kerala seaboard.

Ole F.Jakobsen (Danish Ornithological Society) reported that he saw a flock of 35 at Fort Cochin, Cochin Coast on 5-5-1990. He is familiar with this species from the Red Sea.

REFERENCES : *Hbk* 3:55-6; *Pic.G:*46(7). (Note that the illustration is faulty as it shows a white tail contrasting strongly with the upper tail coverts and the rest of the upperparts. *Hbk* (3:55) says, "Upper parts including tail-coverts, tail, and wings dark ashy grey.") According to Harrison (*SEABIRDS* 1985), "In winter best separated from Common Tern by greyer rump and tail."

DESCRIPTION : Size : House crow-; length c 35 cm (13 $^1/_2$ in.) In size, and its winter plumage, it is very similar to Arctic and Common Terns, but its upper tail-coverts are pale grey, not white as in the other two. Bill dark

blood-red at base black on terminal half, with a small pale tip. Legs and feet bright red. Almost impossible to differentiate from Arctic and Common Terns in the field. Identification, even of dead specimens is best left to experts.

HABITS : Behaviour similar to that of other pelagic terns.

BREEDING : Nearest breeding place: Vengurla Rocks south of Ratnagiri (Maharashtra) on the West Coast.

470 BLACKBELLIED TERN

Sterna acuticauda J.E.Gray

INTRODUCTION : The first published record of its occurrence in Kerala is that of A.J.Gaston who reported (*JKNHS* 2:, Oct 1979) that he saw 2 flying over the river Bharathapuza near Cheruthuruthi on 26-3-1978. D.N.Kurup saw a few between Chamravattom and Ottapalam in R.Bharathapuzha "in all the months of the year (between April 1988 and March'89) except during the SW monsooon." On 2-10-'92 and again on 4-10-'92, P.K.Ravindran saw one over inundated paddy fields on the bank of Bharathapuza near Trittala, Palakkad Dt.. C.Susanthkumar, Arun.C.G, and Jayan Joseph saw one at Manakkodi 'Kole' on 10-1-93.

Between April 1944 and October '53, during the Christmas holidays in December and the summer holidays (April to June) KKN used to see some in R.Gayathri at Kavasseri. All records are for April, May, November and December. This tern was not as regularly seen as the River Tern and could have been mistaken for the Whiskered species. Quite often, however, the combination of long deeply forked tail and traces (greatly varying in shade and extent) of black on breast and belly were noted.

REFERENCES : *Hbk* 3:57-9; *Pic.G:*46(13); *PHIB:*486; *Bs.of Sn-In:*367; *FGBSEA:*163.

MALAYALAM NAME : കരിവയറൻ ആള; *Karivayaran āla.*

DESCRIPTION : Size: House crow; length c 33cm (13in.) A freshwater tern, not found on the sea coast. Smaller and slimmer than River Tern, with thinner bill. In winter likely to be confused with Whiskered Tern which, however, has much shorter tail and dark bill. In breeding plumage, "sandy brown with a black cap; black belly; forked tail; orange-yellow bill; orange-red legs." In winter streaky on the head for a short period; underside usually has some black streaks. For a short period after breeding there is very little black on head or belly. Bill is then dull orange-yellow with a dusky tip.

Call: a shrill *kek-kek* (Usha Ganguli, *Bs.of Delhi*, 1975), 'shrill but pleasant *krek krek*' (Smythies quoted in *FG B SEA*.). "Tail paler grey than the back; the long outer feathers white." (Whistler.).

Note: In summer plumage, Blackbellied has black under tail-coverts -those of Whiskered are white.

HABITS : Flight, feeding and other habits similar to River Tern's but has a penchant for catching flying insects on the wing or picking them up from the water surface. (In R.Godavari, at Rajamundry, KKN had noted that when the water was choppy due to strong winds, these terns tried to fish only while flying against the wind and the waves. At that time they flew low over the water; while flying downwind, they flew at a good height, never looking down at the water.)

BREEDING : Not recorded in Kerala. Elsewhere breeds on the sandbanks of large rivers, usually with other terns and swallow-plovers.

On 3-4-'93, during a bird-survey at R. Bharathapuzha from Shoranur to Purathur, CSK, Biju, Prabhakar, Paul Venkidangu and Siddharth saw a pair of Blackbellied Terns in breeding plumage at Pallam. The terns were first noticed attacking a Crested Honey Buzzard *Pernis ptilorhynchus* flying over a sandbank where a breeding colony of Small Indian Pratincoles *Glareola lactea* with about 15 nests was found. Later the terns were seen 'dive-bombing' at Little Egrets, Whitenecked Storks etc. which were feeding nearby and were chasing away Jungle Crows and Brahminy Kites. The terns mobbed the observers when they ventured close to the nests of the Pratincoles, making shrill *kreek-kreek* calls. Though they could not find any nest of the terns during the 3 hrs. (10.30 am to 1.30 pm) they spent at that place, the agitated behaviour of the terns made the survey team believe that they must be nesting along with the Pratincoles. Some more Blackbellied Terns were met with during rest of the survey, but none of them exhibited such behaviour.

471 - 473 BROWNWINGED (BRIDLED) TERN

Sterna anaethetus Scopoli

INTRODUCTION : Winter visitor to the West coast of India. Not recorded in Kerala before November 1978. On 12-11-'78 K.V.Sreenivasan was given a fresh carcass of this tern by a fisherman of Puvvar c.25km S of Trivandrum. Parts of another specimen were found by Suresh Elamon on the beach at the same place on 18-3-1979 (*JBNHS* 78:167). Identification confirmed by H.Abdulali who informed KKN that the bird found 12-11-78 was a juvenile and added that the nearest record was of a male and female

"which fell on board off Cape Camorin on 26th September 1864."

REFERENCES : *Hbk* 3:59-60; *Pic.G:*46(9); *Bs.of C:*337.

MALAYALAM NAME : Nil.

DESCRIPTION : Size: House crow; length c 37cm (14 $^1/_2$ in.) A medium sized sea tern (slightly smaller than Lesser Crested), with dark greyish-brown mantle, wings and tail; a greyish or whitish hind-collar; white underparts; underwing white with brown quills; long outerfeathers of deeply forked tail largely white; forehead and supercilium (passing beyond the eye) pure white; crown, nape and a broad stripe from bill through eye to nape, black. Bill, legs and feet black. Sexes alike. In winter plumage, crown brown, flecked with white. Smaller than Sooty Tern from which "it may be distinguished by its longer white supercilium, greyish hind-collar, and greyish-brown, not, black, mantle" - G.M.Henry.

HABITS : Usually found offshore in small flocks of five or six. Feeds mainly on fish scooped up from the surface. (According to G.M.Henry it feeds largely on "a small, silvery-grey bug of the 'pond-skater' type, abounding in tropical seas which scuds along the surface, looking like a drop of quick silver." (*Bs. of C:* p.338) Rests on rocks, ships' rigging or floating objects (buoys, wreckage etc.) Voice: 'a rather hoarse *krek* or *quirk.*'

BREEDING : Breeds during the SW Monsoon on atolls and islands. Nearest breeding places Vengurla Rocks and Laccadive and Maldive islands.

474 SOOTY TERN (WIDEAWAKE TERN)

Sterna fuscata Linnaeus

INTRODUCTION : Only once recorded in Kerala. Apparently rare vagrant (storm blown). D.N.Mathew and E.A.A.Shukkur reported the trapping of an adult female identified as *S.fuscata nubilosa* Sparrman at Ramanattukara (campus of the University of Calicut) c 12km inland from the seacoast, in the first week of June 1973. (*JBNHS* **71:**144-5).

REFERENCES : *Hbk* 3:62; *Pic.G:*46(16); *Bs. of C:*339; *SEABIRDS:*73; *FGBBE:*155; *FG B SEA:*164.

MALAYALAM NAME : Nil.

DESCRIPTION : House crow; length c 43 cm (17 in.) An oceanic tern very similar to but slightly larger than, the Brownwinged. Upperparts much darker (look black rather than brown); broader white patch on forehead;

white supercilium stops just above eye. (For other differences see BROWN-WINGED TERN.) Breast and throat white; abdomen and under tail-coverts greyish. Sexes alike. In winter, crown and eye-stripe speckled with white. (According to *SEABIRDS* there is no marked seasonal variation in the plumage of adults.) Call: "A wild *wide-awake*" (*Hbk*); "a nasal *ker-wacky-wak*" (*FGBBE & SEABIRDS*.) This call, heard at night around ships, made sailors dub it the 'Wideawake' tern.

HABITS : Very similar to the Brownwinged Tern's.

BREEDING : Nearest breeding places the Laccadivies and Maldives December to May.

476 SAUNDERS'S LITTLE TERN

Sterna saundersi Hume

REFERENCES : *Hbk* **3**:65; *Bs. of C.*:336

The account of the (BLACKSHAFTED) TERNLET, *Sterna albifrons* (*saundersi* Hume) on page 141 of *BOK* has to be amended as follows:

(1) Change common name to SAUNDERS'S LITTLE TERN.

(1) Remove the square brackets from the title; change the scientific name to *saundersi* Hume, and add to the field characters:

'call a sharp *creek, creek* or *cree-uk* of the same quality as that of the Pied Kingfisher's *chirruk* call' (*Hbk* **3**:64-65). *JBNHS* **16**:13 mentions a specimen of this species taken in Kerala. KKN and friends found small flocks of 10-15 ternlets (subspecies uncertain) on the sandbar between the sea and the backwaters at Veli on the 18th and the 25th of January 1975. They noted that the call sounded like *chekek-chekek*. CSK states that 10-20 have been noted at Matakkara every winter since 1986. Earliest date 13-9-'91.

The nearest breeding place seems to be Vattakottai (near Cape Comerin or Kanyakumari) where Margaret Wilkinson found nests on sand dunes in 1961 and earlier years. On 20-8-'61, she found a nest with 2 eggs in it. (*NLB* 1964 April, pp.1-2).

480 SANDWICH TERN

Sterna sandvicensis Latham

Plate II, 7

INTRODUCTION:According to *Hbk***3**:70 there was only one sight record of this tern: from Gujarat, in May 1958. But recent reports suggest that it has become a regular winter visitor to the West Coast of India, Rameswaram

Island and Sri Lanka since the late 1970's.

The earliest of these records was of a bird shot on 11-3-1976 at Cherai (c 10°N× 76° 15 E) by C.K.Krishnaprasad of Thundathil, c.15km N of Cochin. This bird had a ring which had been put on it at a Reserve in the Caspian Sea on 26-6-1975. (V.C.Ambedkar, *JBNHS* **82:**410). R.S.Lal Mohan reported *JBNHS* **83:**664 that 3 Sandwich Terns had been taken at Rameswaram (one each on 24-6-83, 17-9-'83, and 7-11-83). The bird taken on 17-9-83 had a Russian ring on its leg. T.W.Hoffman stated (*JBNHS* **84:**440-42) that this tern was first recorded in Ceylon in December 1977 and it too had a Russian ring on it. Subsequently there were reports of 6 sight records of this tern in Ceylon between 21-9-78 and 23-2-81. Hoffman himself observed 1 to 6 birds seen for some 6 weeks from 16-2-86 on rocks off the Colombo coast. Taej Mundkur reported (*JBNHS* **84:** 680-82) 10 sight records from the Gujarat coast in addition to the one mentioned in the *Hbk.* These were of 1 to 63 birds seen between 15-10-84 and 26-1-87. He suggested that the birds seen between May and July "were probably sub-adults overwintering here."

Heinz Lainer who did a qualitative survey of the Sandwich Terns coming to rest on a sandspit at Monjim Beach, Goa, from March 1982 to December 1986 found this tern in varying numbers (1 to 500) in every month of the year. He concludes, "The Sandwich Tern can be categorized as a regular winter visitor (to Monjim Beach) in substantial numbers, with a sizeable summering population of non-breeding birds." (*JBNHS* **87:**298-9.)

The views expressed by T.Mundkur and H.Lainer get very strong support from the observations of various birdwatchers in Kerala. LN, PKU and R.Venugopalan report (*JBNHS* **86:**458) that this tern was first seen by LN at Kadalundi on 6-10-1985. Their note says, "From January to March (1986) (these terns) were present in hundreds. On 10 March we estimated their numbers at 500."The birds were never seen fishing in the estuary. "It appeared that they went for fishing in the open sea in the mornings and evenings and came to the estuary to rest during the hot hours of the day." On 27 March (1986) there were large numbers; more on the 5th and 19th of April, none on 1 June. In *BLACKBUCK VII* (1)1991 PKU and LN say that they saw this tern in the estuary of R.Bharathappuza also. CSK, whose observations of this tern at Kattampalli and Matakkara cover the period from March 1986 to March 1991 comments: "Regular winter visitor to Matakkara and the most numerous of the terns found there. The largest group (seen on 31-11-1986) was of 300+ birds. At Kattampalli 4 were seen on 26-7-'86 and 2 on 1-8-86. Latest date for Matakkara: 1 May (in 1987); earliest date in 1991: 8th September. Birds seen on 26-7-86 and 1-8-86 were in winter plumage and were probably juveniles over-wintering there." (*NLB XXX* Mar-Apr 1990.) Jafer Palot saw 150+ at Mattool Beach, Cannanore Dist. on 25-2-1989. C.Mohankumar saw "about a dozen in February and March 1990, March 1991 and 29-2--'92 at the mouth of the Kayamkulam backwaters ((9°8′N × 76°27′E)

REFERENCES : *Hbk* 3:70-71; *Pic.G:*46(18).

MALAYALAM NAME : കടലുണ്ടി ആള; *Kadalundiāla* (on the analogy of 'Sandwich Tern' which name, according to Bruce Campbell, was derived from a place called Sandwich, in Kent, England.)

DESCRIPTION : A largish sea-tern looking wholly white at a distance, with a noticeably forked tail, and a long slender black bill with a whitish (pale-yellow) tip. Flight rather gull-like. Juvenile has black-tipped greyish white tail, dull blackish bars on scapulars and blackish arrow-head marks on wing-coverts and tips of primaries. (*SEABIRDS*).

Both in summer and winter resemble Gullbilled Tern, but is distinguishable by its long slender black bill with yellow tip (yellow tip obscure in juveniles), and forked tail. (Fork narrower than in other Sterna terns, but deeper than in Gullbilled.) Legs black. Sexes alike.

In winter plumage crown chiefly white with streaky black crest. Does not hawk for insects over land as Gullbilled does.

CALL : Loud harsh rather high-pitched *kirrik.*

HABITS : Similar to those of Large and Lesser Crested Sea terns. Frequently hovers high over the water and plunges to catch fish. "A forceful diver, flying higher, plunging harder, and submerging deeper than its relatives." (Bruce Campbell) Rests and/or preens on rocks and sandbanks during forenoons and afternoons; feeds in the sea mornings and evenings.

531 WESTERN (?) TURTLE DOVE

Streptopelia orientalis meena (Sykes)

INTRODUCTION : *Streptopelia orientalis meena* (Sykes) is, according to *SYNOP* 2 (p.155) "Winter visitor to northern and peninsular India south to Karnataka. Vagrant to Sri Lanka", and *S.o.erythrocephala* (Bonagatti) "Resident subject to local movements. The Indian peninusula..... south to Karnataka." That *S.o.meena* may be a vagrant to Kerala also is suggested by the Vernay Survey Report which says that William Davison secured a specimen at Manantoddy. During the Chimmony bird survey in the latter half of March '92 V.Santharam saw one on 22-3-'92 in moist deciduous biotope c.2 km from the dam. He had seen it once on 21-12-'91 at Peechi. This subspecies may, therefore, be provisionally included in the Kerala list, awaiting confirmation.

REFERENCES : *Hbk* 3:143-5; *Pic.G:*49(16); *Bs.of C:*250; *PHIB:*394-5; *Bs.of SI:*282.

MALAYALAM NAME : ചെങ്ങാലിപ്രാവ്; *Chengāli prāvu.*

DESCRIPTION : Similar in shape to Spotted Dove, but larger; pinkish-brown with rufous scale-marks on dark wings; forehead and crown grey; a patch of black and grey bars on either side of neck (not around hindneck as is the "chess-board" of Spotted Dove). In flight grey rump and white-tipped dark tail contrast strikingly with the bright rusty-red (ferruginous) scapulars and wing-coverts. (*Bs. of C:* G.M.Henry). Bill blackish (horny-brown), iris orange, legs and feet purplish-red (magenta). Sexes alike. In 533 *S.o.erythrocephala* (Peninsular Turtle Dove) forehead to mantle pinkish red, under tail-coverts and fringes of tail grey (while in 531 underparts are much redder.)

HABITS : Similar to those of Spotted Dove. Feeds on the ground picking up fallen grains of paddy and other cereals and seeds. When disturbed flies up into trees.

CALL : 'a dull sleepy drone *coo-coo-kakour*' (Whistler)'; 'a hoarse, rather mournful *goor-----gur-gugroo* repeated in slow runs' (*Hbk*). Affects open mixed deciduous and bamboo forest, foothills country and neighbourhood of cultivation.

BREEDING : 531 (*S.o.meena*) breeds in the Western Himalayas and migrates south 'upto Mysore' in winter. 533 (*S.o.erythrocephala*) is a breeding resident in peninsular India between Bihar and Orissa in the north and Mysore in the south. This form has not so far been recorded in Kerala.

[546 LARGE CEYLONESE PARAKEET

Psittacula eupatria eupatria (Linnaeus)

INTRODUCTION : Although mentioned in *BOK*, not described. The VS Report (*JBNHS* 37:751) has, 'Jerdon says that it is found in the forests of Malabar. Stewart is said to have found it in Travancore'. *SYNOP* 2 (p.159) says, 'Resident subject to local movements. The Indian peninsula south of the range *P.e.nipalensis* (i.e. below 18°N.), and Sri Lanaka..' There is, however, an unconfirmed recent record from Wynad reported by Alan H.Morley. He writes, "Except for 2 or 3 sightings near the (Botanical) Sanctuary, most sightings were deep in the forest. One day I saw a party of about 15 deep in the forest 5 or 6 km from the Sanctuary at dusk." He stresses the heavy build, large powerful red bill, green head, red on shoulder, and long tail. The Botanical Sanctuary is at Periya, North Wynad. Till further confirmation is available it need not be included in the Kerala list.

This is the largest of Indian parakeets. Between the Mynah and House

Crow in size (about the size of a pigeon; length including tail c.53cm. or 21in.) Grass green with a massive, deeply hooked red bill and a conspicuous deep red patch on the shoulder (secondary wing-coverts). Adult male has black-collar in front and a pink collar behind; female and immature birds do not have the collar, but are otherwise similar to male. In flight utters a harsh loud high-pitched single scream *kee-arr* constantly.

Roseringed Parakeet is similar in appearance but has no red wing-patch; it is much smaller and has a smaller bill and different calls.

REFERENCES : *BOK:*157; *Hbk* **3:**166-7; *Pic.G:*50(3); *PHB:*332-4; *Bs.of C:*184-5.]

581 SMALL CUCKOO

(Also known as **LESSER CUCKOO** and **LITTLE CUCKOO**)
Cuculus poliocephalus Latham

INTRODUCTION : The Vernay Survey Report (*JBNHS* **37:**518) mentions a specimen (a male) in the British Museum, taken at Cannanore on 7-9-1882 by Wardlaw Ramsay. In December 1991, participants in a survey of Wynad birds are reported to have met with the Small Cuckoo. Details not available. (*INDIAN EXPRESS,* Kochi, dated 8-1-1992, p.3).

REFERENCES : *Hbk* **3:**213-215; *Pic.G:*51(9); *Bs.of C:*168; *FG B SEA:* 184.

DESCRIPTION : Size between Redvented Bulbul and Common Myna, with a longer, graduated tail. *Hbk:* Myna + Length c 26 cm (10 in.). An uncrested cuckoo, a little larger than Baybanded and Plaintive Cuckoos, resembling Common Cuckoo and Indian Cuckoo in appearance, flight and habits. Lacks the broad black subterminal tail-band of Indian cuckoo and has the edge of the wing ashy instead of white or barred brown and white. Ben King regards the absence of contrast between blackish tail and upper tail-coverts as a major field-mark.

"Slaty-grey above, black-barred white below, the underparts suffused with buff. Sexes more or less alike.. Most satisfactorily recognised by its distinctive, husky chattering call, *That's your choky pepper* (accent on *choky*)" - *Hbk.*

Some females are 'hepatic' (upperparts chestnut barred with black) as are juveniles at one stage. Colours of bare parts: "Iris brown; eyerim yellow. Bill blackish horny; base of both mandibles, commissure and gape yellow. Legs and feet wax yellow" - *Hbk.*

This bird is described thus in *A FIELD GUIDE TO BIRDS OF THE USSR* V.E.Flint et al (Princeton Univ. Press, 1984): "Length 22 cm. Head, throat upper breast, and entire back are gray; wings and tail are blackish-brown; tail feathers with white tips; breast and belly buffy white with wide, black bars,.... call: fairly loud sounds resembling *'vot-tut-to, te-tyouhe'* "

Cuckoos in general are shy and secretive, keeping to the canopies of trees, usually betrayed only by their loud calls or songs. The calls, described as distinctive or characteristic, unfortunately, are not uttered in the non-breeding season.

The Small Cuckoo's call is described in the *HANDBOOK* as "a curious unmusical rattling, or chattering cry of 5 or 6 notes, the first half going up in scale, the second coming down, well-rendered as *That's your choky pepper ..... choky pepper* (accent on first *choky*), uttered several times in succession, each repetition somewhat lower than the preceding. Timbre rather bulbul-like, but harsh and husky; pattern of call vaguely reminiscent of the brain-fever shrieks of *Cuculus varius.*"

In the *FIELD GUIDE TO THE BIRDS OF JAPAN* (1982) voice is described as a "loud five-note whistle, the first 3 at the same pitch, the 4th higher, the 5th lower". Ben King (*FGBSEA*) describes the voice of the form that migrates to Japan as a "loud, full, stuccato whistle *pot-pot-chip-chip-to-you*, the 2nd pair of notes somewhat higher than the 1st, the last note lower; or *who-who--what-who-who-who-wha* (Smythies)". "Affects well-wooded country" (*Hbk*); "Forests, open scrub, second growth" (Ben King).

Sight records of this and similar species which are silent in the non-breeding season are of little value.

610a PENINSULAR BAY OWL

Phodilus badius ripleyi Hussain and Khan

INTRODUCTION : A single specimen of of the Peninsular Bay Owl was obtained by M.A.Reza Khan and V.S.Vijayan while conducting a survey of the Parambikkulam W.L.Sanctuary, on 30-4-1976 at the Periasolai Coffee Estate, Nelliampathy Hills (c. 10°36'X76° 40' E). The habitat was wet evergreen forest. (*JBNHS* **74**:334-6).

On 14-2-'92 Natarajan, a tribal field assistant of R.Kannan, (then studying the Great Indian Hornbill at Top Slip in the Indira Gandhi WL Sanctuary, Tamil Nadu), while guiding some tourists in the Sungam Range of the Parambikulam WL Sanctuary came across a Bay Owl sleeping on a branch of a small tree. One of the tourists, C.Jeyakaran of Kodaikanal, secured a

good photograph of the bird in colour. Kannan sent KKN a copy of the photograph along with his report of the sighting of the first live individual of this rare bird. KKN had seen and handled the skin of the Bay Owl secured by Reza Khan and V.S.Vijayan, when he visitied Dr. Salim Ali at the BNHS on 24-1-'77 and could straightaway recognise the bird in the photograph as a Bay Owl (subspecies ?).

According to Kannan the spot where the bird was seen, though only a kilometre away from Top Slip township, was on the Kerala side of the border.

Later on Kannan, on 6-4-'92, himself saw another bird of the same species about a km NE of where a bird was seen on 14-2-'92.

REFERENCES : *Hbk*:3:319.

MALAYALAM NAME : റിപ്ലിമൂങ്ങ; *Riply moonga.*

DESCRIPTION : Size and appearance similar to those of Ceylon Bay Owl. Dark brown to chocolate brown above. Below, lilac. Upper breast to abdomen, and back from head to rump, with dark brownish to blackish spots. Crown, back and wings deep chocolate. Bastard wing and outermost 5 primaries barred with black, gradually fading on the 4th and 5th. Secondaries barred with black bands, darker and complete on the inner webs, lighter and incomplete on the outer. Seven distinct black bars on the rectrices, fading gradually towards the tip.

Measurements : Wing 208 mm. Bill from skull 33mm. Tarsus 51mm. Tail 81mm.

Among the differences Dr Ripley noted between the single specimen of this new race of *P.badius* and the only specimen available to him of the Ceylon race *P.b.adsimilis* are: (1) *ripleyi* is darker above, with much finer spotting, the white spots very much reduced all over in number as well as in size; (2) the crown is darker chocolate-brown with only occasional black spots, lacking the black-and-white droplets found in *adsimilis*. (3) the black spots on the pale buffy lilac feathers in the centre of the crown are only half the size of the spots on the crown of *adsimilis*; (4) underparts a darker and richer lilac than in *adsimilis*; with similarly reduced spotting on the breast feathers (5) the outline of each droplet suggests a single droplet rather than a double one.

The above is based on the account published by S.A.Hussain and M.A. Reza Khan in *JBNHS* 74:334-6. G.M.Henry in his *BIRDS OF CEYLON* describes the Ceylon Bay Owl as "one of our rarest birds" of which less than a dozen specimens had been recorded. His concluding remark, equally applicable to Kerala birdwatchers, is: "Persons who come into possession, or have opportunities for observing the habits, of this rare owl, are urged to do all they can to note and record permanently every detail about it."

617 PENINSULAR SCOPS OWL

Otus scops rufipennis (Sharpe)

INTRODUCTION : In *BOK* (p.181) Salim Ali's brief note on this bird is put within square, brackets, presumably because the labels on the 3 specimens in the British Museum lack precise data.

On 18-3-1950 and 3-12-1950 c. 8 am on both days, KKN saw an owlet in the Doni foothills, which he could not identify at that time. It was 8-9" in length; dark chocolate head and face, yellow eyes; from throat to vent white with profuse black streaking; leaden bill. Upperparts could not be seen and ears, if any, not evident. On 3-12-50 it was sunning itself on a branch 30 feet up a way-side tree. On seeing people, it uttered a *kroo* before flying into deeper jungle. This bird, of which the Silent Valley specimen referred to below reminded KKN strongly, could have been of the species *0. scops*. In April 1975 at Parambikulam KKN heard a call very like that described by Whistler as a "regular and rhythmic *wuck-chug-chug*, which goes on endlessly like the working of a pump-engine", but could not see the bird. In his letter of 14th May 1990 to C.Sashikumar, Andrew Robertson mentioned that the Indian Scops Owl had been recorded from Periyar by Ben King in 1967.

However, that *O.s.rufipennis* does occur in Kerala was established by the discovery on 8 May 1991, of a dead specimen at Sairandhri in the Silent Valley National Park by C.A.A.Basheer and P.N.Unnikrishnan of the park staff. The skin was identified as that of a Peninsular Scops Owl by KKN and sent for confirmation of the identity to Humayun Abdulali. He wrote to KKN that it did "seem to be *O.s.rufipennis* (but) it was not possible to get any other skin for comparison. I will write to you again afterwards if I should think there is a change." As nothing has been heard from him subsequently on this matter, and as the *Hbk* includes Kerala in the range of *O.s.rufipennis,* it is included herein. ".....with a powerful torch, it is not difficult to observe the bird at night around Thekkady and the lake" - *Birds of Periyar,* AR & MCAJ. Jafer Palot also has seen this bird on several occasions during his stay at the Periyar WL Sanctuary from Sept. 1991 to Feb. 1993. V.Santharam considers this owl as fairly common in Peechi-Vazhani WL Sanctuary, Trichur Dt.

REFERENCES : *Hbk* 3:263-4; *Bs. of C:*197-8.

MALAYALAM NAME : ൈസരന്ധ്രി നത്ത്; *Sairandhri nath-thu.*

DESCRIPTION : Size Myna-; length c. 19cm (7 1/2 in.) A slim, 'eared' owlet, smaller than the Collared Scops Owl, very similar to *O.s.pulchellus* and *O.s.sunia* (*Hbk* Nos 615 and 616) "but browner." The plumage of these small birds is" highly variable with dark rufous and greyish phases.. sight records not reliable." (*Hbk*). Sexes alike. The 'ears,' not always erected, are conspicuous when raised "in fear or excitement." "Iris pale yellow, golden

yellow, or dark brown (age?). Bill horny green or horny yellow, tipped blackish. Feet dingy yellowish flesh or fleshy grey." -*Hbk.*

VOICE : Same as that of *O.s.sunia*, "a monotonous 3-noted 'song' variously described as *kurook-took, wukh-tuk-tah,* and *wuk-chug-chug,* repeated at short intervals endlessly in a very regular and rhythmic manner." R.L.Fleming (Sr) described it in *NLB* 6(7)9,1966, as *pluck-pak-pluck.* G.M.Henry describes the 'song' of the Ceylon race as "a loud monotonously repeated *tuk-tuk-torok* the first *tuk* being much less loud than the others", and says, " I have heard exactly the same note in the forests of Travancore - evidently produced by the Travancore race of this owl". AR & MCAJ are of the opinion that Salim Ali has confused the call of this owl - *uk..krukroo* - as an additional call of the race of the Jungle Nightjar *Caprimulgus indicus* present here, which account for his lack of records for the Peninsular Scops Owl. (*Birds of Periyar*)

HABITS : Like those of other Scops Owls. Entirely nocturnal and thus seldom seen. Habits, therefore, largely unknown. Feeds on beetles, grass-hoppers and other insects; also mice, small birds lizards etc. - *Hbk*

BREEDING : Not recorded in Kerala. Season, probably as elsewhere, January to May. Nests in hollows in trees, laying 3 to 5 white eggs.

[663 LONGEARED OWL

Asio otus (Linnaeus)

INTRODUCTION : Around 4.30 pm on 26-12-1950, in an extensive patch of scrub jungle at the foot of a high hill in Nelliyamkunnam (76°32′E × 10°37 N) c 3 km south of Alathur town, Palghat Dt. a babel of bulbuls, Common Woodshrikes, Jerdon's Chloropsis, Blackheaded Orioles and other birds led to the discovery by KKN of an unfamiliar 'horned' owl on a branch 20′ up in a small bombax tree. It was sketched on the spot and details noted down.

Length 12" with the tips of the 'ears' extending more than an inch above the crown. 'Ears' whitish, with a broad black streak down the middle. Eye orange-yellow. Facial disc pale brownish; an ill-defined white patch below the throat. Breast dull white with rather widely spaced thick blackish streaks; abdomen rufous without any bold markings. Legs and toes feathered. The forehead and crown were dark brownish with close dark streaking. The upper-parts could not be seen, but that part of the wing which was visible appeared to be dark brown with numerous greyish-white spots and splotches. The quills seemed to be chestnut. Bill bluish or horny.

The bird had a slim, elongated appearance and sat bolt upright, unmindful of the tumult around it. When alerted by a chuckle, it stared fixedly at KKN and went on puffing out the middle of its breast and agitating it rhythmically.

KKN informed SA of the sighting and was advised to confirm the identification by collecting a specimen before sending a report for publication. So the matter was dropped.

That unconfirmed sight record is included here in the hope that some reliable observer(s) may come across the bird in Kerala and confirm its occurrence.

REFERENCES : *Hbk* **3**:313-14; *Pic.G*:53(6); *FG B BE*:174; *FG B USSR*:No.366,p.174.

MALAYALAM NAME : നെടുഞ്ചെവിയൻ മൂങ്ങ; *Neduncheviyan moonga.*

DESCRIPTION : Pigeon +. Length c 37 cm (14 1/2 in.). Slim-looking; mottled grey-brown above, buff (rusty-yellow) below, boldly streaked and finely barred with blackish. Wings long and pointed. Legs and toes thickly feathered. Two long (c. 5 cm) upstanding black and buff ear-tufts; yellow or bright golden-orange eyes; black bill. Sexes alike.

Affects semi-desert country,low jungle of stunted trees etc.

HABITS : Winter visitor. Extremely nocturnal. Usually solitary. Roosts in daytime sitting upright on a leafy branch close to the trunk with its plumage sleeked and body elongated, making itself inconspicuous. Feeds on small rodents, small birds, lizards, beetles etc. According to *Hbk,* voice not recorded in India. *FG BBE* describes it as a 'low, sighing, mournful *oo-oo-oo*. Also various yelping and wailing notes, and wing clapping.' *FG B USSR:* 'muted *hoo-hoo-oo* or plaintive *oo-oo-oo* and other sounds.' Breeds in Europe and Central Asia, nesting in the disued nests of crows and kites.]

700 BLYTH'S or HIMALAYAN WHITERUMPED SWIFT

Apus pacificus leuconyx (Blyth)

INTRODUCTION : In the *HANDBOOK* Malabar is included in the range of this form probably because of Jerdon's statement in *THE BIRDS OF INDIA* that he obtained several specimens in Malabar. In the VS Report (*JBNHS* **38**:30) Whistler, referring to John Davison's experience of its abdundance along the coast of North Kanara (*JBNHS* **12**:47), says that Jerdon's statement need not be discredited. AR & MCAJ include this species in *Birds*

of Periyar on the strength of a single record by N.J.Redman. Jafer Palot reports that he has observed this swift at Periyar WL Sanctuary in Nov. and Dec. 1991 in large flocks in company of Redrumped Swallows and Dusky Crag Martins. C.K.Sujithkumar and K.Anilkumar saw some at Vengoli, Parambikulam WL Sanctuary on 23 Dec.1992.

REFERENCES : *Hbk* **4**:49; *Pic.G*:56(7); *Bs.Sn.In.*:192.

DESCRIPTION : Sparrow +/-. Length c. 15 cm (6 in). Same size as House Swift and likely to be mistaken for it; differs from it in having a deeply forked tail. Blackish-brown above with a broad white rump-patch; chin with narrow white scale-marking (in the field breast and belly look blackish).

In the *BIRDS OF SOUTHERN INDIA* the bird is described thus: "Bill black; irides dark brown; feet fleshy.....upper plumage glossy blackish-brown; rump white with shafts black; chin and throat white; remainder of lower plumage brown (each feather) margined with white and submargined glossy blackish-brown. Sexes alike."

Breeds in the Himalayas. Movements outside the breeding season erratic. Habits and food similar to those of other swifts. Often seen in association with Alpine and House Swifts.

767 COMMON GREY HORNBILL

Tockus birostris (Scopoli)

REFERENCES : *BOK*:226;*Hbk* **4**:132; *Pic.G*:59(2); *PHIB*:307.

MALAYALAM NAME : നാട്ടുവേഴാമ്പൽ; *Nattu vezhambal.*

FIELD CHARACTERS : A large, slim, ungainly grey bird with a small pointed casque above the large, flat, curved blackish bill and a long, graduated, brownish-grey tail which has a white tip and a broad dark band above it. Sexes alike, but female's casque smaller. Arboreal plains species, with a loud squeaky call '*ki-yye*' reminiscent of the Pariah Kite's call.

DESCRIPTION : Size : Kite +/-; length c.61 cm (24 in.). Upper plumage brownish-grey with a broad, blackish eye-stripe and a long whitish supercilium. Rectrices dark brown with broad whitish tips. According to *FBI* 2 (quoted in the *Bs. of Sn. Ind.* p.185) "tail grey, all but the central pair of feathers with a broad sub-terminal black band and tipped white." Neck grey. Chin to breast grey fading to white on the abdomen. Iris brownish orange to red in the male, brown in the female. Legs and feet leaden to slaty black. According to *FBI* 1 (Blanford) in immature birds the primaries lack white

tips and most of the bill is white.

HABITAT : *Bs. of Sn. Ind.* says of the old Madras Presidency, "Found all over the Presidency, except on the Malabar and Travancore coasts." Whistler (*PHIB*:1949) also exempts the Malabar coast "from Bombay to Travancore". *Hbk* says that it is not found in the heavy rainfall areas of Kerala. However, as it is found in most parts of the lowlands of Malabar where the rainfall is quite heavy, it may be better to say that in central Kerala north of the Trichur Dt. it is a common resident of the plains. But in April 1992 PON saw one in the neighbourhood of the Veterinary College, Mannuthy, where he had never seen it earlier. JP reported that he had seen two on 5-4-1990 and one on 21-2-'91 at Nedumkayam, Nilambur RF. "Affects open but fairly well-wooded country, with a scattering of Ficus (fig) trees, roadside avenues, groves and the rambling gardens in the neighbourhood of cultivation and habitaions." Plains and foothills upto c. 1000 m (*SYNOP* 2). The rapid disappearance of large old trees has made the bird rare in many areas.

GENERAL HABITS : Although it will descend to the ground now and then to pick up fallen fruits or winged termites, it is a bird of the larger trees and was partial to the old mango, tamarind, jujube, banyan and peepul trees lining the roads till most of the them fell to the axe. Found singly or in pairs and parties of four to six; when banyan and peepul trees are in fruit many will flock to these trees. Very often tosses up food held at the tip of the bill and tilting head back adroitly catches it as it falls into its open beak. Often eats the pulp of unripe fruits of the Yellow Oleander after deftly peeling it, using only its beak (KKN. *JBNHS* **51**:739). It is also fond of ripe neem fruits but swallows only the seed and its slimy coating after discarding the skin. To catch flying termites on the wing, it swoops down and captures those that are flying below is perch. "When flying from tree to tree across the open the flight is heavy and undulating with alternate flappings and glidings, and all the movements of the bird are clumsy and ungainly." (Whistler). While gliding, the wings are bent down stiffly with the tips of the primaies turned up so that, from the front or the back, the bird's wings and body resemble an archer's bow.

NESTING : Described by Whistler (*PHIB*) as follows: "The breeding season is from April to June.. The eggs are laid..in a large hole in the trunk of a tree, at any height from 10 feet upwards.... When ready to lay the female enters the nest-hole and remains therein until the young are about a week old. She spends the first 2 or 3 days in plastering up the entrance to the hole with her own ordure - which hardens into a clay-like substance. For this work she uses the flattened sides of her beak as a trowel. When the work is completed only a narrow vertical slit is left. After this the droppings are thrown out daily through the slit. The female depends on the male for all her food.This he brings held in his beak and the female receives it through the slit. The seeds of fruit she has been feeding on are cast out in a closed sack made of

the epithelial layer of the gizzard. The female lays one to five whitish eggs. For about a week after the eggs hatch the male has to provide food for the female and the nestlings. The female then breaks open the 'lid', comes out and again seals up the entrance as before. Till the fledged young comes out of the nest, the parents share the task of feeding them".

At one nest in a roadside jambool tree in Nelliyamkunnam near Alathur, Palghat Dist. on 30-4-1947 KKN saw the male feeding an inmate. By 2-5-1947 the entrance had been opened and then resealed. In front of the new lid was a pale creamy ring marking the place where the first lid had been. This turned brown in a day or two. On 12 May the entrance was again open; the male and female were near the nest being mobbed by Common Mynas and Roseringed Parakeets. A little later one of the adults (or a fledging?) was systematically pecking off and swallowing what remained of the plastering. On 17 May, at 6.15 am, 4 hornbills were near the nest. (Did the whole family, or the two fledglings at least, sleep in the nest?) A year later, (on 5 March, 1948) this nest was found sealed up again. The seal was yellowish-brown and newly-made. On 7 May'48 the nest was open and a Common Myna was seen going in. The earliest date on which a nest was found sealed up was 26-2-1961 (Kavassery). Usually from mid-April to mid-May pairs are seen visiting their nest and from mid-May parties of 4 become common (earliest date 13 May (in 1950). The following observations are also KKN's. On 3-2-1987, an adult with a juvenile (or a female?) that had no 'casque' put its bill into the adult's mouth and was fed. (Too early a date for a juvenile?). Still, on 13-2-1987 saw a party of 3 of which one had only a rudimentary casque and was obviously a juvenile.

At times the hornbill exhibits boldness and belligerence. On 7-7-1989, for instance, one feeding on ripe peepal figs hopped towards a Jungle Crow and put it to flight.

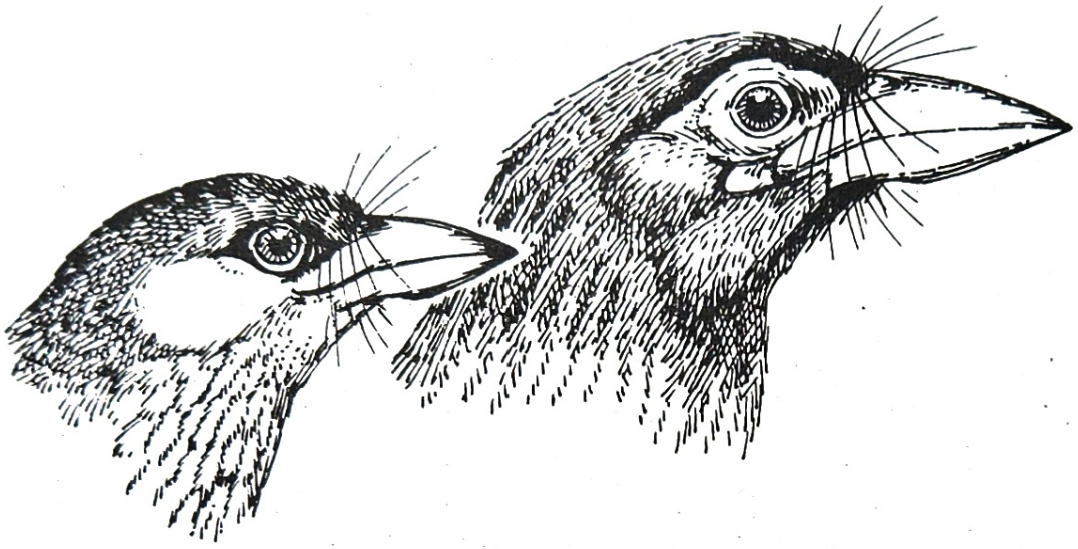
The female is said to undergo a complete moult during her 'imprisonment'. That the male, too, moults some of its plumage is suggested by the fact that on 4 May 1946 a male was seen with middle tailfeathers only half as long as the others. On 2-6-1987 KKN saw a single bird with a moulting tail.

Odd-behaviour : On 29-12-'89 at 4 pm. a pair flew from a mango tree to the next compound. One of these flew to a coconut frond just 6' above the ground and then down to the trench dug around the tree's base. It pressed its body down, spread its wings and shook them vigorously. Its behaviour suggested anting. Almost at once one of a party of 4 Whiteheaded Babblers feeding near by flew at the hornbill and put it to flight.

On 24-5-91 at 4.10 pm one of 2 birds in a peepul uttered an unusual *klrey klrey* note quite unlike the usual squealing call. The development of the casque deserves close study.

781 WESTERN GREEN BARBET

Magalaima zeylanica inornata Walden



Small Green Barbet, Western Green Barbet

INTRODUCTION : This subpecies of *M.zeylanica* has to be included in the Kerala list as there is a male collected by Wardlaw-Ramsay at Cannanore on 9-9-1882 and 3 other specimens labelled 'Malabar' in the British Museum (*JBNHS* **37:**515). There is one specimen taken on 29-8-1893 at Kuravenuth in Travancore in the collection of birdskins at BNHS. (*JBNHS* **71:**246).

REFERENCES : *Hbk* **4:**152; *Pic.G:*60(3).

MALAYALAM NAME : വലിയ ചെങ്കണ്ണൻ കുട്ടുറുവൻ; *Valia chengannan kutturavan.*

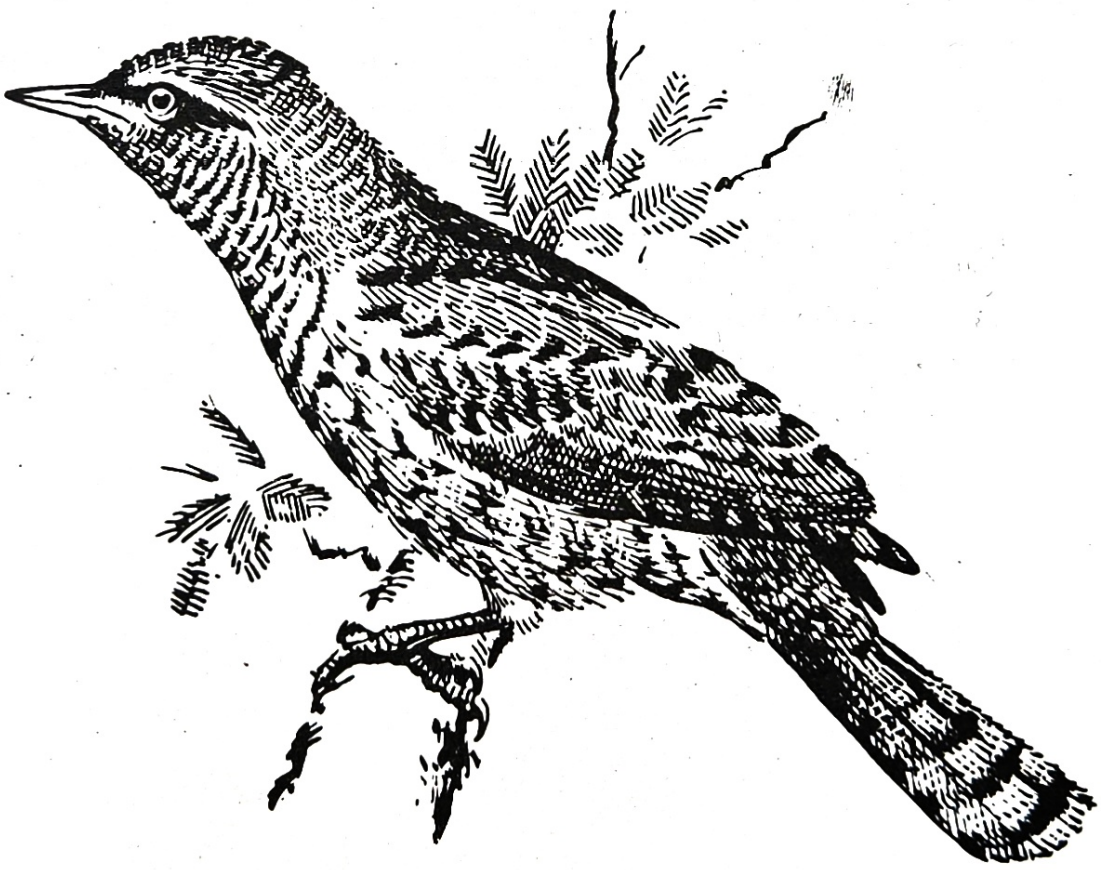
DESCRIPTION : Very similar to the Ceylon Barbet (see p.230, *BOK*), also with a conspicuous orange patch around eye, differing from it in having the brown extending further on to the breast and back. General plumage paler and duller with the streaks on the breast narrow and confined to the pale shafts; pale specks on wing-coverts wanting; streaks on upper back and head less pronounced. (*Hbk* **4:**152).

HABITS : Same as those of 782, Ceylon Green Barbet. (See *BOK* p.230).

VOICE : On 4-5-1978 in the Mundanthurai W.L.Sanctuary KKN closely watched a Large Green Barbet while it was calling, beating time to its song with head and tail. The call sounded quite different from that of the Small Green Barbet. It was a fluty *kuhu kuhu..... kuhu kuhu* to which a distant bird replied with identical notes.

796 WRYNECK

Jynx torquilla torquilla Linnaeus



Wryneck

INTRODUCTION : Very rare winter visitor? First recorded in Kerala by M.C.A.Jackson, who saw one at Vandiperiyar (Peermade Hills) on 10-3-1967 (*JBNHS* **64**:367-8). LN and P.S.Sivaprasad saw one at Tenur (Parli, Palghat Dt.) in the first week of December 1980. Alan Morley saw one in Peria, N.Wynad, on 4-11-'90.

As no specimen has been taken, the subspecific identification requires confirmaion.

REFERENCES : *Hbk* **4**:168; *Pic.G*:62(1); *FG BBE*:187.

DESCRIPTION : Smaller than bulbul; length 19cm (7 1/2 in). Sexes alike. At a distance could pass for a female sparrow. Upperparts and longish rounded tail closely barred and vermiculated with brown and tipped with light rufous; a whitish chevron on the back, the whole suggestive of a night-jar's upper plumage or, as Whistler put it, "lichen-covered bark." An ill-defined whitish eyebrow and below it a blackish eyestripe that continues down the sides of the neck. A dark streak on the nape that broadens into a blackish patch on the mantle. Tail with 3 or 4 dark bands. Chin and throat buff, narrowly barred with black. Rest of the underparts fulvous-white barred with brown arrow-head marks. Eyes brown. Bill, legs and feet brownish-horn.

HABITS : Seen singly or in pairs often feeding on the ground; feeds on ants and their pupae. Often hops about with the tail raised. Although related to woodpeckers and equipped with zygodactyl feet and clings like woodpeckers to branches and stems, it perches across branches like a passerine. Call, seldom uttered in winter quarters, is a shrill, quick repeated nasal *chewn, chewn, chewn.* Usha Ganguli once heard one "uttering a persistent, loud *chink, chink, chink* for five minutes." -*A GUIDE TO THE BIRDS OF THE DELHI AREA* (1975). Breeds in Kashmir, and in places outside India.

883 RUFOUSTAILED FINCH-LARK

Ammomanes phoenicurus testaceus Koelz

Plate IV, 2

INTRODUCTION : On 1-1-1952, beside the Kalpathi river, at Palghat KKN saw a lark resembling the Bush Lark, but darker brown with a reddish tail which had a 'pyramid shaped' blackish tip. Sitting on the clods in a ploughed field, it warbled a pleasant song. There were some Pipits and Ashy-crowned Fich-Larks around. Although quite familiar with the Rufoustailed Finch-Lark which he used to see frequently around Rajahmundry (Andhra

Pradesh) from 1945 to 1949, KKN did not publish this sighting. Between the 9th and 22nd of December 1953 KKN noted that a pair regularly visited the parade ground of the Military Camp at Madukkarai (at the eastern end of the Palghat gap and c. 12 km from the Kerala border). These birds, which always sang for a while from 5.30 am, used to prefix a *yap-yap-yap* to their song.

On the 8th and 9th October 1989 C.Susanthkumar and S.Rajeevan saw and photographed two Rufoustailed Finch-Larks near the dam in Walayar (Palghat Dt.)

The bird may, therefore, be admitted to the list of Kerala birds.

REFERENCE : *Hbk* 5:16;*Pic G*:64(9).

MALAYALAM NAME : ചെമ്പുവാലൻ വാനമ്പാടി; *Chembuvalan vanambadi.*

DESCRIPTION : Rather dumpy, rufous-brown, stout-billed uncrested lark with a bright rufous tail ending in a triangular black band. Tail colours and pattern conspicuous in flight. Iris, brown; bill horny brown; legs and feet brown. Sexes alike. Found in open stony scrub country, fallow land and neighbourhood of cultivation.

STATUS : According to the *Hbk,* "Resident, subject to some seasonal local shifts. Peninsular India south of c. 15°N lat. Oddly enough not yet recorded from Kerala, though doubtless occurring there in appropriate biotope."

HABITS : Usually seen in pairs or trios; sometimes in flocks of 50 or more. Runs in short zigzagging spurts, looking for seeds, cereal grains and insects. In flight utters a sweet song of several syllables, whistles and chirrups. Often trills snatches of song from a stone or clod on the ground. (In Andhra Pradesh KKN had noted that it was fond of perching on power and telephone lines.) During the breeding season indulges in aerobatics similar to those of the Ashycrowned Finch-lark.

BREEDING : Not recorded in Kerala. Elsewhere the season is February to May. Nesting habits similar to those of bush larks and pipits.

912 PLAIN SAND MARTIN

Riparia paludicola (Vieillot)

INTRODUCTION : "Resident subject to local movements. Pakistan from Baluchisthan and Kohat eastwards through India and Bangladesh to Burma and from the Himalayan foothill south to *c.* 18°N" *SYNOPSIS* **2.**

On 10-1-1993, V.Santharam identified five Plain Sand Martins at Aranattukara 'Kole' (Thrissur Dt.), hawking insects over the wet paddy fields

along with Redrumped and Common Swallows. S.Anitha, D.Nandakumar and T.K.Sajeev also were present during this sighting. Santharam had earlier seen this species at Chilka Lake (Orissa).

Regarding the status and distribution of sand martins *Hbk* says: "The status of sand martins found within our limits needs clearing up by a methodical collecting of specimens, especially of breeding birds. The superficial similarities of the two species make the published sight records unreliable and has doubtless lead to a good deal of confusion and ambiguity." (*Hbk* 5:50, *footnote.)*

REFERENCES : *Hbk* 5:51; *Pic.G:*65(3); *PHIB:*229; *FG B SEA:*248.

DESCRIPTION : Sparrow-; length *c.* 12 cm (4 1/2 in.). The whole upper plumage greyish-brown, "rather dark on crown and paler on rump", wings and tail darker brown; lower plumage from chin to lower breast smoky grey; rest of the underparts white. Bill black, legs and feet dark brown. The lack of dark breast band and pale throat distinguish it from the similar Collared Sand Martin *Riparia riparia*. Pointed wings and short almost square tail. Sexes alike.

HABITS : Gregarious. Graceful fliers, they almost invariably feed in the vicinity of water, hawking insects, high or low in the air in association with swallows and swifts over riverine tracts, marshes and tanks. Roost in reed-beds. In the mornings, often perch on telegraph wires in close-packed rows sunning and preening. Call: loud hard squeaks in flight; "the alarm-note is a harsh *ret* and the song is a chattering twitter."- *PHIB*

BREEDING : Not recorded in Kerala. October to February. A pad of dry grass roots lined with feathers, placed in a chamber at the end of horizontal narrow tunnel often a metre or more deep excavated by the bird itself in a sandy bank, a number of nest holes being situated together in large colonies. Eggs 3 or 4.

913 CRAG MARTIN

Hirundo rupestris Scopoli

See p. 78

INTRODUCTION : *SYNOPSIS* 2 gives this bird's winter range as "most of the central and Western Indian peninsula.....south to the Palni Hills", although, according to the *Bs. of Sn. Ind,* the *FBI* includes North Travancore also. In the *Hbk,* Ali and Ripley say, ".....South to Mysore and TamilNadu; probably also Kerala whence not yet recorded."

During a bird survey of the Silent Valley V.Santharam saw two birds at

Poochippara (altitude 1376 m.) on 26-12-1990 which he believes were of this species. However, he says that confirmation is desirable. The bird may, therefore be provisionally admitted to the Kerala list.

REFERENCES : *Hbk* **5**:53-54; *Pic.G*:65(5) (but the picture does not show the contrast between abdomen and under tail-covers and hence is misleading.)

DESCRIPTION : Sparrow; length c 14 cm (5 1/2 in.). Resembles Dusky Crag Martin, but slightly larger. Upperparts ashy-brown; underparts almost whitish with chin and throat spotted with brown; under tail-coverts blackish. Tail square. In overhead flight contrast between whitish abdomen and blackish under tail-coverts striking. At close quarters, when tail is spread, a large white spot on the inner webs of all tail feathers except the central and outermost pairs visible. Voice: a soft, low *chit, chit*. The winter haunts are grassy hills with crags and precipices; also old hill-forts.

HABITS : Similar to Dusky Crag Martin's. Associates freely with the swallows. Flies and feeds like them on flies, beetles etc. But roosts on ledges of rock or of fortress walls.

BREEDING : In the Himalayas from April to June. Nests like Dusky Crag Martin. (See *BOK* p.257).

921 WIRETAILED SWALLOW

Hirundo smithii filifera Stephens.

INTRODUCTION : SA did not include the Wiretailed Swallow in *BOK* although the VS Report (*JBNHS* **36**:840-41) says that on 2-2-1871 Vipan shot 3 and saw others 5 miles from Cannanore and about 200 yards from the coast. This record was first published in *STRAY FEATHERS* VOL I:495.

Between 19-12-1968 when it was first seen by KKN at Koduvalli near Tellicherry and 21-9-69 (date of his last sighting in Cannanore Dt.) this bird was seen singly or in pairs at a number of places around Dharmadam on 11 birdwatching trips. A pair was seen also at the Quilandy bridge in Calicut District on 1-5-70. CSK often met with the Wiretailed Swallow in Cannanore Dist. at Kattampally, Madayippara and Chithrari. Jafer Palot found the bird at Baliapatam and Payangadi (Cannanore Dist) on 21-2-1986, 12-3-'87 and 13-8-90. Recorded once in the Silent Valley National Park during a bird survey in December 1990.

The only month for which there is no record of this bird is November, and this probably has more to do with the movements of birdwatchers than of the birds. Therefore, the bird may be described as a resident.

REFERENCES :*Hbk*5:63-64; *Pic.G*:65(9); *PHIB*:237-8.

MALAYALAM NAME : കമ്പിവാലൻ കത്രികക്കിളി; *Kambivalan kathrikakkili.*

DESCRIPTION : Size: Sparrow +/-; length c. 14 cm. (5 1/2 in.) excluding the 'wires' which in the male are c. 18 cm (7 in.) long. Dark glossy greenish-blue above, with a bright chestnut cap and snow-white underparts and wing-lining. At close range the 'wires' confirm its identity. These 'wires' are the bare shafts of the outer pair of tailfeathers. The tail is nearly square and all the feathers except the two central pairs have a white spot on the inner web. Sexes alike in plumage. Note that the Eastern (Common) Swallow has forehead and throat chestnut (no red cap) and a steel-blue breast band. Iris dark brown; bill and legs black.

HABITS : Found invariably near water (canals, rivers, lakes, and reservoirs) in pairs or family parties. Feeds like other swallows on flying insects. Rests on overhead wires and parapets of bridges. Descends to the ground only to collect mud for nest-building. Utters a short song and twittering notes.

BREEDING : Season prolonged. Not a colonial nester. Nests resemble those of the Crag Martin. In Kerala seems to nest under bridges or culverts. On 22-12-1968 KKN observed a female busy collecting mud and building a nest under a span of the bridge-cum-sluice at Kattampalli. The male sat on an iron post near the sluice uttering various snatches of song such as *sweeeyi-swee-swee-see---tititiii--chivi chiwivi-ti-treeti--tee tee tee ti-tititi--chwivi chwivi*. On 13-1-1969 and 8-2-1969 a female was collecting mud close to the Cheeku Bridge near Tellichery and on the same day he saw a completed feather-lined nest. On 5-3-91, V.Santharam saw "a pair at Nedumgayam (Nilambur RF) carrying feathers to the underside of a bridge."

The breeding season in N.Malabar seems to be December to May.

922 CLIFF SWALLOW.

Hirundo fluvicola Blyth.

INTRODUCTION : C.A.Abdlul Basheer and PON saw it now and then from December 1990 to 8th April '91 in the Silent Valley National Park, mostly at Walakkadu (c. 1285 m.). Ranjit Daniels is said to have confirmed the identification.

According to *SYNOP* 2 it is a partly migratory resident in most parts of India east of Eastern U.P. and eastern M.P. "south to Coimbatore".

REFERENCES : *Hbk*:5:64-66; *Pic.G*:65(17); *PHIB*:239; *Bs.Sn.In.*:108.

DESCRIPTION : Smaller than sparrow. Length c. 12 cm. (4 1/2 in.) A small swallow with a very slightly forked , unspotted tail. Glossy steel-blue above; forehead and crown dull chestnut with black shaftstreaks; a broad brownish eye-stripe; wings, rump and tail dull brown. Fulvous white below, profusely and boldly streaked with blackish on sides of head, chin, throat and breast; abdomen unstreaked, whitish. Eye, legs and feet brown; bill black. Sexes alike. (The Nilgiri House Swallow has a chestnut chin and throat and is grey below.)

HABITS : Affects open country and cultivation in close proximity to canals, rivers and reservoirs. Usually found at all seasons in flocks, often very large. The birds fly about, uttering a short *trr, trr* or a twittering call, near water, hawking small flying insects. Said to drink very frequently, skimming over the water. On cold, misty mornings often sit huddled together on telegraph wires near or over water, as the Eastern Swallow does, till the sun is well up. Status uncertain in Kerala.

BREEDING : Not recorded in Kerala. A colonial nester. 25 to several hundred pairs may build close-packed nests at the same place. Nests made of mud, shaped like retorts, but unlike the Redrumped Swallow's nests, with short entrance tubes sticking out of one side (not struck to the surface to which the nests are attached.) Nesting colonies always close to water, on the face of overhanging cliffs or beneath the arches of bridges, sometimes even on the perpendicular walls of buildings. Said to be double-brooded, nesting from February to April, and again in July and August.

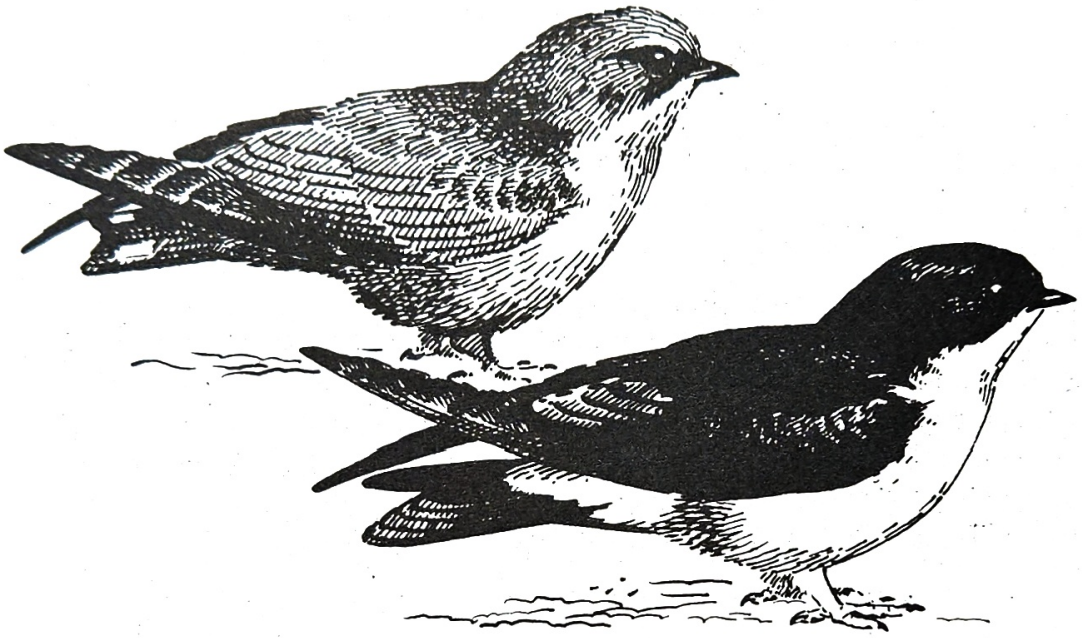
925 HIMALAYAN STRIATED (REDRUMPED) SWALLOW

Hirundo daurica nipalensis Hodgson

SA had secured 4 specimens suspected to be of this subspecies, at Karupadanna c. 10°16′N × 76°12′E on 27-12-1933 during the T.C.Survey (*JBNHS* **38**:514). In *SYNOPSIS* 2 Ripley includes Kerala in its winter range, and so does the *Hbk.* But SA and Ripley say (*Hbk* **5**:69): "In winter several subspecies are found side by side in the Indian plains, impossible to differentiate in th field with certainty." The amateur should not attempt subspecific identification even of dead specimens as it requires the examination of many skins (See *MUSEUM DIAGNOSIS* under 925 and 927 in *HANDBOOK.*)

930 EUROPEAN HOUSE MARTIN

Delichon urbica urbica (Linnaeus)



European House Martin and Crag Martin

INTRODUCTION : SA includes the House Martin in *BOK* (p.261), but says that he did not come across it during the T.C.Survey. He expresses a doubt about the origin of the single British Museum speciemen labelled 'Travancore', and places this brief note within square brackets. PON saw the House Martin, first in the Silent Valley National Park on 2-12-90 and later on several days in the Chinnar WL Sanctuary, Idukky Dist. During the Silent valley bird-survey, the House Martin was seen by CAAB, PON and others in December 90 and January, February and March '91. The bird was seen and its identification confirmed by Dr.Sathis Chandran Nair (at Attappady) and Dr.Ranjit Daniels and PKU in S.V.National Park. There the bird was seen in small numbers (3 to 15 birds) between December '90 and March

'91 at Poochippara, Nilakkal and Walakkadu, mostly in grasslands, all above 1000m., sometimes in company with Redrumped Swallows, Alpine Swifts and Ediblenest Swifts.

REFERENCES : *Hbk.*:**5**:74-75; *Pic.G.*:65(10); *Bs.Sn.In.*:105; *FG B BE*:195.

DESCRIPTION : = Sparrow. Length c. 15 cm (6 in). Sexes alike. Small black and white swallow with short deeply forked tail. Glossy blueblack above with pure white rump. Pure white below from chin to under tail-coverts including feathered legs and feet.

HABITS : Gregarious. Parties hawk tiny flying insects high above the ground. Flight swift and graceful,a few rapid wingbeats followed by glides, swoops, twists, turns etc.

STATUS : Only a winter visitor most probably. Breeds in the Himalayas May to July. Ripley (*SYNOP* 2 p.261) says, "May occasionally overwinter in Southern India (January record from Coimbatore.)" See also the Silent Valley records para 2 above.

933 INDIAN GREY SHRIKE ?

Lanius excubitor (*lahtora* (Sykes))?

INTRODUCTION : Southernmost records on the Indian mainland are from Cudappah (Andhra Pradesh) and Salem (TamilNadu). Reported from North Wynad (the Botanical Sanctuary, at Periya) by Alan Morley who wrote to CSK, "This bird is no stranger to me. When I arrived in Wynad it was still raining, and there were several Grey Shrikes about. In fact there was a high concentration of Shrikes in general. Many Rufousbacked and Brown Shrikes and some Greys. They were all feasting on a high population of insects that were present at the time, mostly dragon-flies and butterflies. As the rains died out in mid-November, so the numbers of shrikes decreased. I was then left with only two localities where I could expect to see a Grey Shrike." During the Wynad Bird Survey (23 to 26-12-'91) some participants are said to have recorded the Grey Shrike. C.K.Sujithkumar and K.Anil Kumar saw it on two occasions in teak plantations in Sungam Range, Parmbikulam WS Sanctuary during a bird survey (21-25 Dec. 1992).

The species may, therefore, be provisionally included in the Kerala list subject to confirmation.

REFERENCES : *Hbk* **5**:79-81; *Pic.G.*:94(12) (the illustration should have shown a dark frontal band as in fig. 11); *Bs. of C*:57.

The Grey Shrike, compared with the Rufousbacked (Southern Grey-backed) Shrike, according to G.M.Henry, "has grey and white instead of rufous on the hinder part of the body" and the white on its wings is more extensive; its underparts are pure white and there is no tinge of rufous on the wing-coverts. Length c. 25cm. or 9 $^1/_2$ in. May be an uncommon winter visitor to Kerala.

1089a ASHY MINIVET

Pericrocotus divaricatus (Raffles)

INTRODUCTION : In *SYNOP* 2 and the *Hbk* only a single record from mainland India is mentioned (from Karnala near Bombay - *JBNHS* **62**:303). In *NLB* (XXX March - April 1990) Andrew Robertson reported that he saw a single Ashy Minivet at Thekkady (Periyar WL Sanctuary) on 7-12-1989. This bird briefly joined some Scarlet (Orange) Minivets and Small Minivets in a mixed hunting party and was soon chased off by a Racket-tailed Drongo. In the *HANDBOOK* (**6**:39) this bird is described as an accidental winter vagrant. However, V.Santharam has found it to be a regular though scarce winter visitor (November to April) to the Guindy National Park and the Theosophical Society estate, both in Madras city, since 1985 at least. The largest number seen at one time was 8. Santharam saw the Ashy Minivet at Sriharikotta (Andhra Pradesh) also in February '90.

REFERENCES : *Hbk* **6** : 39, *FGBSEA* : 258

DESCRIPTION : Adapted from *Hbk* (No. 1089 (a), **6**:39.) Smaller than bulbul, larger than Small Minivet. Length c. 18 cm (7 in). A typical minivet of grey and white plumage, distinguished from all other minivets by the total absence of red in the plumage. ("Plumage more like one of the White Wag tail's" - Bro. Navarro.) Male: forehead white; crown and nape black; a black streak from bill through eye merging into the black of the head; back and rump grey; tail black with white outer feathers. Below, including sides of neck, white. A white patch on wing visible in flight. Female: forehead faintly whitish; crown and nape grey; upperparts entirely grey. Iris dark brown; bill and legs black.

HABITS : Santharam (*NLB* July-Aug.,'90) found the bird's behaviour to be similar to that of other minivets. Very active and restless, never staying long in any tree. It was usually seen on the top branches, especially bare, caterpillar-infested ones. Sometimes hovered and caught prey which it battered on a branch before swallowing. He describes the call as of 3-4 notes rather reminiscent of the Palm Swift's, but softer and shorter. Calls uttered both at rest and in flight. Brother Navarro described the bird's voice as

"resembling the harsh voice of a shrike" and Austin as "a rattling but somewhat musical call. (*Hbk*).

1231 YELLOWEYED BABBLER

Chrysomma sinense sinense (Gmelin).

Plate IV, 4

INTRODUCTION : According to VS Report (*JBNHS* **35**:475) Jerdon had found it at 'Wulliar' (Walayar?).

KKN saw it near Malampuzha in an extensive patch of second growth on 29-10-1950 and again in more open scrub near the labourers' lines at Malampuzha on 10-12-1950 (a flock of 12-15, most of them without the middle tail-feathers), and again on 13-3-'55. On 19-5-1988 he came across this babbler in very bushy second growth at Anakkappara (Veezhumala foothills, Alathur Taluk, Palghat Dt.) It was a single bird 'singing' from a bushtop (*JBNHS* **87**:302). On 9 and 10 October, 1989, C.Susanthkumar and S.Rajeevan found some pairs at Walayar (Palghat Dt.)

The bird may, therefore, be regarded as a resident of the Palghat Gap and adjacent areas.

REFERENCES :*Hbk* **6**:190-192: *Pic.G:*79(2); *PHIB*:51.

MALAYALAM NAME : മഞ്ഞക്കണ്ണി ചിലപ്പൻ; *Manjakkanni chilappan.*

DESCRIPTION : Smaller than bulbul. Length c. 18 cm (7 in.). Reddish brown with cinnamon wings, a prominent white supercilium (from beak through lores over the earcoverts); a yellow rim to the reddish eye; bill black contrasting strongly with white lores. White below with buff tinge to lower abdomen. Tail long and graduated. Legs and feet pinkish to orange-yellow. Sexes alike. Mouth of breeding birds black; at other times orange-brown.

HABITS : A bird of the scrub, secondary jungle, tall grasses and shrubbery. Plains to c. 1200 m in the hills. Usually in flocks of 5 to 15, often in company with Wren-Warblers. Work through the thickets looking for caterpillars, insects, spiders and berries. Every now and then one would come to the top of a bush or reed, utter a few cheeping notes and dive back into cover to continue foraging. Flight weak, jerky and undulating. Normal call note a loud, rather plaintive *cheep-cheep-cheep*; alarm not a harsh *churr;* song, delivered form the top of a bush or tall grass-stem, a sweet whistle of 5 syllables *twee-twee-ta-whit-chu,* and a loud *cheep-cheep-cheep*, *cheep-cheep* interspersed with a low *kru-kru-kru* (Smythies quoted in *Hbk*).

BREEDING : Not recorded in Kerala. Season elsewhere April to November, peaking during the monsoon in July and August. Nest a deep, conical cup cemented with cobweb and suspended by the edges between a number of stem or placed in a crotch 2 to 6 feet above the ground.

1307 NILGIRI LAUGHING THRUSH

Garrulax cachinnans (Jerdon)

INTRODUCTION : According to the *Hbk* this species is confined to the Nilgiri Hills (Western Tamil Nadu.) During the bird survey of SVNP, CAAB and PON found flocks of 10-12 above 1800 m at Sispara Betta in an area full of hill guava (*Rhodomyrtus tomentosa*) trees on 31-3-1991. They noted that the habitat of this species did not overlap those of the other laughing thrushes. PON says that on one occasion Dr.Satis Chandran Nair who was with him confirmed the identification.

REFERENCES : *Hbk* 7:40-41: *Pic.G:*77(2); *PHIB:*37.

MALAYALAM NAME : നീലഗിരി ചിലപ്പൻ; *Nilagiri chilappan.*

DESCRIPTION : = Myna; length c. 20 cm (8 in.). An olive-brown and rufous laughing thrush with a prominent white supercilium. Above, crown slaty brown, nape slaty. Lores and a short streak behind eye black. An incomplete white eye-ring. Cheeks olive-brown. Below, chin black; breast bright rufous, belly and flanks olive brown. Iris red; bill black; legs and feet leaden with a greenish tinge. (*G.jerdoni,* two races of which are common residents in the hills of Kerala, has grey not rufous breast.)

HABITS : A bird of dense undergrowth in forests, estates and gardens. Habits similar to those of the Kerala Laughing Thrushes. A great skulker. Usually found in flocks of a dozen or more, generally as members of mixed hunting parties. When disturbed, creeps away through the bushes or hops up into trees. Very noisy, uttering loud sqeals and outbursts of 'laughter' (which Hume qualified with the epithet 'maniacal') while one member of the flock calls *pee-ko-ko,* another joins in with a harsh *ke-ke-ke* reminiscent of one of the harsher calls of the Tree Pie (*Dendrocitta vagabunda*).

BREEDING : Not recorded in Kerala. Nest, eggs and nesting habits similar to those of the Kerala Laughing Thrushes.

Guy Mountfort in *RARE BIRDS OF THE WORLD* (Collins, London, 1988) includes this species in the list of 'Additional candidates for inclusion in the list of rare and endangered birds of the world.'

1543 PALLAS'S SIBERIAN GRASSHOPPER WARBLER

Locustella certhiola rubescens Blyth

INTRODUCTION : Winter visitor (October to early May). Only once recorded in Kerala (*BOK*:361) by P.V.George who caught a female of this race in the Rajapuram backwaters c. 10 km east of Alleppey on 10 May 1963. (*JBNHS* **62**:304). Specimen preserved.

REFERENCES : *Hbk* **8**:89-90; *Pic.G*:89(1); *FGB USSR* (No.550)243; *Bs. of C*:43.

MALAYALAM NAME : Nil.

DESCRIPTION : Sparrow-; length c. 13 cm (5 in.). Similar to Blyth's Reed Warbler but richer coloured. Upperparts brownish; rump rusty; nape greyish; a pale but long and conspicuous supercilium buffy grey; heavily streaked with grey and dark brown on head and olive-brown back; tail rounded and rusty brown above with all except the middle pair of feathers tipped greyish-white; tail below blackish with broad whitish tip; underparts whitish with breast and flanks tinged brown; under tail-coverts buffy. Eye brown. Bill: upper mandible dark brown, lower fleshy-yellow. Legs and feet pale flesh. Sexes alike. Distinguished from *L.naevia,* the Eastern Grasshopper Warbler, by more rufous rump and white-tipped tail.

HABITS : Affects swamps, bulrush beds and fields of growing paddy. Very quiet and a great skulker. When flushed, flutters a short distance and dives into cover. Feeds on insects. The only call heard in winter is an occasional *chi-chirr*. Breeds in Siberia.

1565 EASTERN ORPHEAN WARBLER

Sylvia hortensis jerdoni (Blyth)

INTRODUCTION : According to *SYNOP* 2 and the *Hbk,* this sub-species of *S.hortensis* is a winter visitor (Aug to March) 'south to Madura (Tamil Nadu)'. PON reports that he saw one at Parambikkulam on 7-4-1989 and one at Marayur c. 10°17'N×77°10'E on 12-10-'90 and another later in the Chinnar W.L.Sanctuary. He describes the bird as slightly larger than a sparrow, with a black cap; rest of upper parts greyish; underparts from throat to vent white; the outer tail feathers white.

As no other birdwatcher seems to have been with him to support his identification and no one else seems to have come across this bird in Kerala, confirmation is desirable. (The editors made sure that it was not a Blackheaded

Babbler (*Rhopocichla atriceps)* that PON saw.)

REFERENCES : *Hbk* **8**:122-24; *Pic.G:*88(3); *Bs.of Sn.In.:*81; *Bs.of Delhi:*235; *FG BBE:*243; *FG B USSR* (No.568):250.

DESCRIPTION : A largish grey warbler with a white throat, dark crown and cheeks. Sparrow +/-; length c. 15 cm (6 in.). A black cap extending below the pale eye and merging with the mantle, upper-parts brownish-grey; tail black, outermost pair of rectrices with outer webs white and with white tips to the next two pairs; under tail-coverts slaty grey, broadly tipped with white. Throat and rest of lower plumage white; flanks and abdomen pale buff. Female's head dark grey and ear-coverts darker than the male's; her back and wings brownish-grey; tail grey with outer feathers white. In both sexes bill blackish-brown, slaty (pale lead) at base of lower mandible; legs and feet olive-brown to slaty grey; irides pale straw or greyish white.

In winter affects semi-desert, stony country and ravines with sparse vegetation and throny trees such as Prosopis and babool. Individuals seem to return regularly to the same place every winter.

HABITS : Arboreal, but also descends to feed in bushes. Great skulker. Restless and lively in its search for insects, berries, seeds and nectar. Voice a harsh *chek-chek-chek* or *chuck-chuck;* a *trr* when alarmed and *chichirichich* . etc.

BREEDING : In N.Baluchistan and N.W.F.Province, April to July.

1570? LESSER WHITETHROAT

Sylvia curruca (Linnaeus)

INTRODUCTION : According to *SYNOPSIS* 2 and *Hbk,* two races of *Sylvia curruca* winter in southern India south-east to Tamil Nadu; *blythi* has been recorded only once from Sri Lanka whereas *althea* is fairly common in northern Sri Lanka. CSK saw one at Chithrari, Pattanur village, Kannur Dt. on 11-10-1992. He could observe the bird for more than one hour as it hunted actively amongst twigs and leaves of thorny bushes (*Randia* sp., *Zizyphus* sp. etc.) and Cashew trees on a lateritic hillock. J.C.Daniel, BNHS, commented on this sighting: "There is no reason why the race *althea* of *Sylvia curruca* should not be found in Kerala. It is found in winter in the Eastern Ghats, Tamil Nadu and Northern Sri Lanka. Atleast it should be a bird on passage through Kerala on the way to Sri Lanka."

REFERENCES : *Hbk* **8**:126-130; *Pic. G:*88(5); *Bs. of C:*47; *PHIB:*169-170.

DESCRIPTION : Sparrow -, length c. 12 cm (5 in.). Above, dark grey, back and wings tinged with brown. Dark lores and darker ear-coverts form a conspicuous eye-stripe contrasting with glistening white chin and throat. Tail blackish brown, outer rectrices white. Below, white tinged with buff on breast and belly. Bill blackish, irides brown, legs and feet nearly black. Sexes alike. "The very similar female of the Orphean warbler (1565) is much larger". (*Hbk*) .

HABITS : In winter, frequents scrub jungle and bushes in semi-desert, in plains and foothills to at least 900 m. A very quiet bird, creeping about singly in bushes and trees looking for insects, caterpillars etc. "Along with tree and leaf warblers, all whitethroats have a comical habit, when hunting, of lunging out with the bill to seize an insect just out of reach, nearly toppling over in the attempt, then quickly steadying themselves with wings." - *Hbk.* Call: "a subdued hard *tek-tek* like the clicking of two stones together or of one's tongue against the palate." -*Hbk.* CSK heard it produce a harsh, but not loud, *kreesh* occasionally, made with fully open beak.

BREEDING : The sub-species *blythi* breeds in Central Siberia from Lake Baikal to the Ob river; *althea* breeds in Kashmir from 1500 to 2700 m, in Astor, Gilgit and Ladakh between 2100 and 3700 m, and from Murree west through N.W.F.P and south through the high ranges to northern Baluchisthan. (*Hbk*)

1578 TYTLER'S LEAF-WARBLER

Phylloscopus tytleri Brooks

INTRODUCTION : Only once recorded in Kerala, by S.C.Harrap and Redman. N.J. on 2-2-1985 on the slopes bordering the Eravikulam Plateau above Vaguvarai, 20 km NE of Munnar, at c. 200m, feeding actively in the middle-storey on the edge of a shola (*JBNHS* **86:**460-61). Earlier records from South India: "2 by Davison in the Nilgiris; a recent record from Dhenkanal Dt., Orissa, February 1975" (*SYNOP* 2, 431).

REFERENCES : *Hbk* **8:**141-42; *Pic.G:*90(5); *Bs.of Sn.In.:*83.

DESCRIPTION : Sparrow-; Length C. 10 cm (4 in.).

No wingbar. Above, olive, looking dull brown in the field. Prominent yellowish-white supercilium reaching to nape; cheeks and ear-coverts yellowish-white with dusky mottling. Below, yellowish-white streaked with brighter yellow on throat, breast and belly. Sexes alike. Iris dark brown; bill dark brown, yellowish-brown at base of lower mandible. Legs and feet greenish-brown to dark brown; soles yellow.

Described by Harrap and Redman (op. cit.) as "Size and shape similar to a Dull Green Leaf Warbler (*P. trochiloides*) (length about 10 cm.). Crown, mantle, rump and wing coverts dull olive-grey. A narrow but well-defined whitish supercilium contrasting with the dark eye-stripe. Remiges and rectrices dark olive-brown, on one individual fringes being olive-green. Underparts off-white, lightly sullied with grey, and with a touch of yellow in the centre of the breast and on the under tail coverts. Bill not noticeably long, but slender, blackish and with a very small pale base to the lower mandible. Legs mid-to pale grey. Call a hoarse, squeaky *huweest*.

"In fresh plumage .... greyish-olive above; remiges and rectrices dark brown fringed with olive-green; underparts yellowish-white streaked brighter yellow. In first winter plumage they are greener above and yellower below. Worn birds are grey-brown above and dirty white below... Particularly in worn plumage, confusion is possible with Largebilled (*P.magnirostris*), Dull Green (*P.trochiloides*) and Bright Green Leaf Warblers *(P.(t) nitidus)*, all of which are common winter visitors to peninsular India."

According to H.Abdulali (*JBNHS* **83**:340) in Tytler's Leaf Warbler "the absence of the wingbar, the narrow bill, the olive-green above, and the long pale yellow eye-stripe are distinctive." It is said to have a distinctive slender profile.

The amateur should exercise very great care in identifying Leaf Warblers most of which are extremely difficult to distinguish in the field. Reasons for deciding the species should always be recorded in as great detail as possible and question-mark placed after the name except when absolutely sure of the identity.

[1637 RUFOUSBELLIED SHORTWING.

Brachypteryx major major (Jerdon).

INTRODUCTION : According to the *HANDBOOK* (8:206) this Shortwing is a fairly common resident of well-wooded sholas in th hills of Southern Mysore (Bababudan, Brahmagiris and Nilgiri Hills) from c. 1300m to 2100 m., mostly above 1600 m., and the Whitebellied subspecies (No.1638, *B.m.albiventris*) a fairly common resident of western Tamil Nadu and southern Kerala, from the Palni to the Ashambu Hills, from c. 900 m. to the highest summits. *B.m.albiventris* is included in *BOK* but *B.m.major* is not.

PON and CAAB report the sighting of a Rufousbellied Shortwing at Nellikkal (c.100m.) in the Silent Valley National Park on 25-12-1990 and later, 4 sightings in all in 3 days, all at dawn or dusk. PON's description and sketch give the following details of the bird's plumage: upperparts dark blue

from crown to tail-tip and on the wings; a pale blue forehead linked to a pale blue supercilium which surmounts the ear-coverts; chin, throat and breast dark blue; an inconspicuous pale (whitish) round patch in the centre of the belly; rest of the underparts including the under tailcoverts rufous. Bill and leg colours not noted.

Features included in the *HANDBOOK* description which are not indicated in PON's sketch or description are (1) the black lores and frontal line, and (2) the olive-brown of the sides (of the belly). In the '*Bird's of Southern India*' (Baker and Inglis) the rump is said to be "white-tipped pale rusty; tail black edged blue; wings blackish-brown edged blue; lower breast and vent white; flanks, abdomen and under tail-coverts pale rufous, tinged ashy on the flanks."

On 18-10-'91 in bamboo facies in Kuppadi Reserve Forest 3km from Sultan's Battery (Wyanad) C.Susanthkumar and P.S.Sivaprasad watched a couple of these birds for long periods between 7.30 and 11.45 am. Of these one was dark blue above, the other greyish-blue. The latter lacked a bluish supericlium.

Alan H.Morley in letters to KKN dated Alattil, 17th January and 2nd February, 1991, gave detailed descriptions of a male and a female he had seen on several occasions near Alattil, N.Wyanad. His descriptions fit *B.m.major* (though he named it *B.hyperythra,* a very rare species endemic to the Himalayas. See *Hbk***8:**205).

The main difference between the Rufousbellied Shortwing (1637) and the Whitebellied Shortwing(1638) is in the colour of the sides of the abdomen: olive-brown in 1637 and slaty blue in 1638. Their habits, food and voice are very similar.

The occurrence of this bird in Kerala requires confirmation preferably by the collection of one or more specimens for which permission has to be obtained from the Chief Wildlife Warden, Dept. of Forests, Trivandrum.]

[1660 RUFOUSBELLIED BUSH-ROBIN?

Erithacus hyperythrus (Blyth)

Plate IV, 3

INTRODUCTION : The distribution of this bird, according to *Hbk*(**8**:206), is Eastern Sikkim, Bhutan and Arunachal Pradesh. South of the Brahmaputra it has been "recorded (winter only?) from Margharita, North Cacher and Khasi Hills". (In Assam and Meghalaya according to *SYNOP*2). It is said to be very scarce.

Therefore, the claim of C.Susanthkumar that he saw it once at Kallar, (Ponmudi foothills, Trivandrum Dt.) on 3-1-1990 and that another of the same species was seen by him and some companions in the Silent Valley National Park during the bird survey in December 1990 is hard to accept. Till these sight records are confirmed by the collection of a few specimens of both sexes, the bird need not be included in the Kerala list. KKN has been assured by C.Susanthkumar in person that he knows the Indian Blue Chat quite well and is sure that he has not mistaken a Blue Chat for the Rufousbellied Bush Robin. However, should some bird watcher happen in future to meet with this Bush Robin, he may find the following account of some use.

DESCRIPTION, HABITS etc. In the *HANDBOOK* (**8**:237-39) the description of *E.hyperythus* is: "Size Sparrow -; length c. 12 cm (4 1/2 in.). Male (adult): above, deep purplish blue. Forehead, supercilium, shoulders and lower rump bright ultramarine blue. Below, ochraceous or bright chestnut. Vent and under tail-coverts white. Female: above dark olive-brown. Rump and upper tail-coverts slaty blue. Tail blackish edged with deep blue. Below, rich ochraceos, browner on breast, brightest at sides of body. Centre of belly and under tail-coverts white. "Iris brown, bill black, legs and feet brown. Typical robin; found singly, flitting form bush to bush, flicking its tail. Sometimes catches insects on the wing." Not very shy. "In winter affects bushes in somewhat open spaces at the edge of forest, along trails and specially along streams in forest." Voice and calls unrecorded.

Ben King (who has revived Hodgson's generic name of *Tarsiger*) and names the bird Rufous-breasted Bush-Robin, describes the bird thus:" Upperparts deep purplish blue with bright ultramarine blue forehead , eyebrow, shoulder and upper tail coverts; underparts orange rufous, with white centre of belly and under tail coverts. Female: rufescent olive-brown above; rump and upper tail- coverts slaty blue; tail dark blue; underparts olive-brown, with a broad rufous-buff streak in centre of throat and a rufous buff tinge on flanks; centre of belly and under tail coverts white.....

Habitat : Evergren forest." (*FG B SEA* 338).]

1672 EASTERN BLACK REDSTART.

Phoenicurus ochruros rufiventris (Vieillot)

Plate IV, 1

INTRODUCTION : In the *NLB Vol.* 21, March-April 1981, LN and P.S.Sivaprasad report that they saw a single Redstart at Mathur c. 16 km SW of Palghat town in Palghat Dt. on 20-11-1980. They say, "the bird allowed

the observers to watch it for an hour. This black and orange-chestnut bird with its characteristic habit of shivering its tail was a male." P.O.Nameer reports that he saw a Redstart in the Palakkal "Kole" lands, Trichur District, on 19-2-1989 and one on 23-3-1991 in the same area.

The only Redstart whose winter range includes South India according to *Hbk* is No.1672, the Eastern Black Redstart. Therefore, it is a description of that subspecies that is given here.

REFERENCES : *Hbk***8:**255-56; *Pic.G:*82(4?)

DESCRIPTION : Size sparrow +/-; length c. 15 cm (6 in.)

A black, grey and bright rufous bird which has an erect stance and a habit of bobbing up and down and shivering the reddish tail at short intervals. Male: whole head, chin, breast and back black; wings brown; rump and tail rufous with the central pair of tail feathers dark brown; underparts below the breast rufous. In winter the black areas look grey and the feathers are fringed with grey. Female, pale brown, with a paler eye-ring. Rump and tail as in the male; below pale fulvous-brown tinged with orange on belly and flanks. Iris brown. Bill blackish brown; gape and mouth yellow; legs and feet brownish-black; soles yellow.

HABITS : Solitary in winter quarters. Males commoner than females. Returns winter after winter to the same place. Perches on a rock or mound of earth and darts to the ground to catch insects. Also hops about on the ground like the Indian and Magpie Robins. Song similar to Wren-Warbler's, a loud trill of 6 or 7 notes followed by a wheezy jingle. "Call note: *tuck-tuck-tititititik* or a mousy *whit-whit whit* like a sqeaking unoiled bicycle wheel revolving at moderate speed". Whistler wrote: "In India it is essentially a bird of open smiling cultivation and pleasant fertile gardens: it haunts the shade, not of deep groves or jungles but little patches of shade amongst the sunshine, perching on the lower branches of trees and flying down ever and anon to pick up its insect food. The call then is a curious little croak." (*PHIB:*98)

BREEDING : May to August in the Northern Himalayas between 3300 and 5200 m in treeless open grasslands.

1710 DESERT WHEATEAR (CENTRAL ASIAN?)

Oenanthe deserti deserti (Temminck)?

INTRODUCTION : LN saw a female in January 1988 at Tenari (Elappully, Palghat Dt.) and a single female " in the next two winters" and 2 females

Desert Wheatear

in "the winter of 1990-91." Jafer Palot told CSK that he saw a Desert Wheater at Madayippara (Cannanore Dt.) on 17th August, '88. According to *Hbk* (9:48) the Wheatear occurs in South India "chiefly from November to February."

"The Desert Wheatear is mainly a winter visitor to Pakistan and India and the southernmost records of this species are from Maharashtra (Poona, Ahmednagar) and Northern Andhra Pradesh (Nirmal)" (Ali and Ripley 1983.)". V. Santharam (*JBNHS* **86:**452) has given a good description of the male he saw in November-December 1986 on the banks of the Adayar Estuary at Madras. "Pale sandy buff on the crown, nape and back. The sides of the head, chin and throat were black, slightly speckled with white. The wings appeared to be black from a distance, but a closer look revealed that they were dark blackish-brown. The upper tailcoverts and the basal half of the tail were white, contrasting with the otherwise black tail. The underparts were pale buff; a pale supercilium bordered the black over the eyes and the dark

wings also had a whitish border. *Hbk* **9**:46 has 'Inner webs of remiges partly white.' The bill and legs were dark."

REFERENCES : *Hbk* **9**:47-8; *Pic.G.*:84(12).

HABITS : "Seen mostly on the ground at times perched on small stones or atop bare branches of Prosopis or Calotropis bushes, invariably flicking its tail, flashing the contrasting tail pattern". Feed mostly on the ground, "at times indulging in flycatching sorties. On the ground, it would run in short spurts, sideways, at an angle... Foraging was done in the sandy area or grassy patches." (Santharam, ibid)

On 10-1-1987 Santharam "heard the bird calling in a quiet and subdued manner and subsequently these warblings were heard on a couple of occasions." The bird was silent most of the time. It kept "to the same portion of the meadow day after day" and was surprisingly tame.

BREEDING : "A few pairs breed in the Quetta area of N.Baluchisthan".-*Hbk.*

1733 ORANGEHEADED GROUND-THRUSH

Zoothera citrina citrina (Latham)

INTRODUCTION : According to *Hbk* this ground thrush does not visit Kerala although it is a regular winter visitor to the Eastern Ghats "South to Russelkonda (Gumsoor).... Irregular farther south in the peninsula to Ratnagiri, Tamil Nadu and Sri Lanka". It has been observed in Tambaram and Nanganallur, near Meenambakkam (the latter by Ms.Bhageerathi Suresh in her compound in an urban setting.) Some were trapped at Point Calimere by the Avifauna teams of the BNHS.

In Kerala it has been seen only by C.Susanthkumar and his companions twice (on 24-11-'88 and 3-12-'88) at Peroorkada, Trivandrum city environs. Susanthkumar is very familiar with the resident White-throated Ground Thrush and has assured KKN that the bird he saw had no white or black anywhere on the face, chin or throat. It was in other respects similar to *Z.c.cynotus*.

REFERENCES : *Hbk***9**:86-88 (In *JBNHS* **76**:366 it is pointed out by the Editors of *JBNHS* that the description of courtship display given on p. 88 actually refers to No.1734 the Whitethroated subspecies.); *PHIB.*:114; *Bs.of C.*:31; *Pic.G.*85:(2 & 3).

DESCRIPTION : Described by Whistler as "a typical thrush in bearing, bright chestnut with back, wings and tail bluish grey in the male and olive in

the female. The whole head, neck and lower parts as far as the vent orange-chestnut, rather darker on the crown and hind neck; the rest of the upper parts bluish grey; wings and tail brown, washed with bluish grey; a conspicuous white spot on the shoulder and another on the underside of the quills; vent and under the tail white. Female: similar to the male but the orange-chestnut is paler and ashy-grey of the upper parts, wings and tail is replaced by brownish olive-green. Iris dark hazel; bill very dark brown, base of lower mandible flesh colour; legs fleshy pink".

HABITS : Similar to those of the Whitethroated Ground Thrush (*BOK* p.384). Found singly or in pairs. Shy skulker. Feeds on the ground in the cover of dense bushes or bamboo-brakes, tossing and turning over fallen leaves in search of snails, slugs, insects, worms, grubs etc. Disturbed, it flies up into a bush or tree where it sits still and escapes notice. Feeds late into the dusk when it may be seen on paths, roads and open spaces. Alarm note, a high-pitched *kreee,* somewhat like the sound of a screeching slate-pencil (Whistler). During the breeding season sings delightfully. Breeds in the Western Himalayas, April to September. See *JBNHS* **76**:366 for an account of the song and courtship display of this thrush by Dinsha J.Panday.

1830 PENINSULAR CHESTNUTBELLIED NUTHATCH

Sitta castanea castanea Lesson.

Plate IV, 7

INTRODUCTION : In the VS Report (*JBNHS* **35**:521) it is said that this bird "occurs in the Wynad and Malabar, round the base of the Nilgiris and in the Palghat Hills." This is repeated in *SYNOP* 2 and the *Hbk* also.

C.Mohankumar reports that he and LN saw one on the 13th and 14th December 1978 at Muthanga, Wynad. The bird was seen side by side with a Velvetfronted Nuthatch. On 17-10-'91 C.Susanthkumar saw one in the Naikatti forest 10 km away from Sultan's Battery. P.S.Sivaprasad was also with him. Members of the Wyanad bird survey of December 1991 came across this nuthatch twice in two other places (*INDIAN EXPRESS* 8-1-'92, p.3). As for the Palghat Hills, P.S.Sivaprasad who has been paying frequent visits to the Doni Hills for some years never met with this bird there.

REFERENCES : *Hbk* **9**:215-16; *Pic.G:*73(3).

MALAYALAM NAME : താമ്രഉദരൻ ഗൗളിക്കിളി; *Thamraudharan gowlikkili.* or മരം നിരങ്ങി; *Maram nirangi*

DESCRIPTION : Sparrow-; length c. 12 cm (4 $^{1}/_{2}$ in.)

Male: above, bluish slaty; a black band from lores to upper back; a prominent long white patch on the cheek; chin white; middle tail feathers ashy-blue, the next two black with ashy-blue edges and tips, the remainder black with white subterminal spots. Below, whole underparts (except chin) deep chestnut; under tail-coverts ash-grey with chestnut fringes. Female similar to male, but underparts cinnamon instead of chestnut . Iris brown; bill: upper mandible black, lower grey at base; mouth pale pink; legs and feet dark brown; soles yellow. (Legs plumbeous, according to *Bs.of Sn.In.*) Velvet-fronted Nuthatch has coral red bill, violet-blue upperparts, white throat and whitish underparts.

STATUS AND HABITS : Resident. Locally distributed in light forest, groves of trees near villages, in deciduous plateau and foothills country; avoids coastal areas. Keeps in pairs or loose family parties usually with mixed hunting parties of insectivorous birds. Behaviour rather like that of the small woodpeckers (eg: Pigmy and Heartspotted) and tits. Moves up from the foot of a tree, clinging to the bark (without the help of the tail, unlike woodpeckers) running up and around, also downwards, with great agility. When it reaches the top twigs, it moves with ease and speed, often along their undersides. While feeding, it hammers loudly on the bark to expose its prey. Utters a mousy, quick repeated double note *chilp-chilp;* also a quavering whistle. Song: a loud *whee-whee-whee-whee-whee*. (Adapted from *Hbk.*).

BREEDING : Not recorded in Kerala. Season: April to September? Nesting habits similar to those of Velvetfronted Nuthatch. (See *BOK* p.392).

SOME WAGTAILS OMITTED OR ONLY MENTIONED IN "BIRDS OF KERALA"

INTRODUCTION : Till the BNHS / WHO Bird Migration Study Project established a birdringing station at Edanad (near Chengannur) in December 1962, only two subspecies of the Yellow Wagtail (*M.flava*) had been recognised: *M.f.thunbergi* (1875) and *M.f.simillima* (1875 a) which Salim Ali had collected during the Ornithological Survey of Travancore and Cochin (January to December 1933.) Only these two subspecies were included in SA's book *THE BIRDS OF TRAVANCORE AND COCHIN* (1953). As a result of the regular netting of the wagtails coming to roost in the sugarcane fields of Edanad, it was established that there were 4 or more subspecies of the Yellow Wagtail (*M.flava*) among the enormous flocks that resorted to the Kuttanad region in winter and roosted in the sugarcane fields of Thiruvalla

and Edanad. Regular mist-netting and ringing were started at Edanad on 21-12-1961. During the 10 weeks of netting (21-12-'61 to 25-1-'62 and 18-3-'62 to 6-4-'62) 20,004 wagtails were caught and ringed according to SA (*JBNHS* **60**:412). In 1963-64 in 64 days from 26-11-'63 the total number of wagtails caught and ringed at Edanad was 21,881 - (Mathew D.N. and P.B.Sekhar, *NLB* Vol.5, May 1964).

The subspecies-wise figures are given below:

	61 - 62	63 - 64
M.f.beema	8624	5927
M.f.thunbergi	7012	7377
M.f.melanogrisea	376	23
M.f.simillima	1535	240
M.f.spp ?	2448	5296

P.V.George whose persistent and arduous tracking of the wagtail hordes he saw flying at dusk in the same direction for some days gives a very interesting account of the discovery of the wagtail roosts at Kottoor near Thiruvalla and Edanad near Chengannur in *NLB* Vol. 2 April 1962 (pp.4-9).

However, in the *BIRDS OF KERALA* (1969) Salim Ali added only *M.f. beema* to the subspecies of the Yellow Wagtail included in the *BIRDS OF TRAVANCORE AND COCHIN*. *M.f.melanogrisea* and *M.citreola* are only mentioned on p.399.

M.f.lutea, according to *Hbk* and *SYNOP* 2 is a "winter visitor to India, south to Sri Lanka." Although there seem to be no records of this form, it is also included (provisionally) in this book as it may be expected to turn up in Kerala.

However users of this book would do well to note what Dr.Salim Ali wrote on the field identification of wagtails (esp. of the *flava* species) in *NLB* 1-10:2 (1961 Sept): "Subspecies of individual examples of wagtails are often impossible to determine with certainty even from museum skins in breeding plumage; in the field it would be rash and of doubtful scientific value to attempt to do so, more particularly in winter plumage in which a great majority of autumn immigrants are likely to be encountered."

1877 YELLOWBACKED WAGTAIL.

Motacilla flava lutea (Gmelin)

REFERENCES : *Hbk* **9**:279-280

This subspecies differs from the Blueheaded Yellow Wagtail (*BOK*.p.401) in having "most of the head yellow without a distinct supercilium" (*Hbk* **9**:279-80)

(It is interesting to note that while Stuart Smith in his classic *THE YELLOW WAGTAIL* (Collins, London, 1950; p.108) says that specimens of Yellowheaded Wagtails found in South Russia have been described as a subspecies, *M.f.lutea* (Gmelin, 1774), it is better to give the non-comittal title of a variation (*M.f.*var *lutea*). But, V.F.Flint et al in *A FIELDGUIDE TO BIRDS OF THE USSR* (Princeton, 1984) elevate it to full specific status: *M.lutea*.).

According to Flint et al (op.cit) the Yellowbacked Wagtail differs from the Yellowheaded Wagtail (they call it the Citrine Wagtail) *M.citreola*, by its green back. The Yellowbacked Wagtail breeds between the lower Volga and the Irtysh rivers in eastern Russia.

1878 TURKESTAN BLACKHEADED WAGTAIL

Motacilla flava melanogrisea (Homeyer)

REFERENCES : *Hbk* **9**:280

In winter plumage not distinguishable from other subspecies of *flava* wagtails. In summer plumage, head black; no supercilium. Female similar to male, but upperparts brownish grey tinged with olive-green; head darker. Underparts yellowish-white, often with dark spots on the breast (the pectoral region). Breeds in Russian Turkestan.

1882 WESTERN YELLOWHEADED WAGTAIL

Motacilla citreola werae (Buturlin)

REFERENCES : *Hbk***9**:283-84

2 examples, both ringed birds, were recaptured at Edanad, one on 29-11-1963 and the other on 13-1-1964. The subspecies of the former was not quite certain. On 16-12-'92 V.Santharam saw two individuals feeding in

a recently transplanted paddy field in the Manakodi 'Kole' lands. Both were in breeding plumage and had grey backs (not green as in Yellow Wagtails.)

In winter it frequents marshes, squelchy grassy margins of tanks and jheels, irrigated rice-fields etc. 1722 wagtails of this species (*M.citreola*) were netted and ringed at Edanad, in 64 days from 26-11-1963. (Mathew D.N.and P.B.Sekhar *NLB* Vol.4, April 1964).

Evidently a not uncommon winter visitor. Subspecific identification difficult even in a museum.

M.citreola, according to the *Hbk* key to the species has underparts bright yellow, back black or grey, and head yellow. *M.citreola werae* differs from the nominate subspecies in being paler and, usually, in the absence of a black hind-collar. "Subspecies not differentiable in the field." (*Hbk* **9**:283.)

Breeds in southwestern Siberia from the Ob river to the Volga. Winter visitor to Kerala (and other parts of India) c. September to April-May.

1886 MASKED WAGTAIL

Motacilla alba personata Gould

INTRODUCTION : Mentioned on page 403 of *BOK* . A specimen had been collected by Ferguson at Munnar 10° 5′N×77° 4′E. and several others had been netted and ringed by the BNHS field teams at Edanad in the 1960's. This subspecies, therefore, deserves fuller treatment than is given to it in *BOK*.

DESCRIPTION : Size bulbul; length c. 18 cm. (7 in.) Similar to *M.alba dukhunensis*, but ear-coverts and sides of neck black; no break between black of throat and black of nape. White on head limited to forehead, a small area around the eye and a short supercilium. White on wing more extensive.

HABITS, FOOD & VOICE similar to those of *M.a.dukhunensis*. Breeds in Turkestan, Gilgit, Afghanistan and E.Persia.

Whistler says (*PHIB* p.244), "There is.... a great deal of variation in the plumage of wagtails in India in winter, and considerable study is required before individuals can be correctly identified."

1964 RED MUNIA

Estrilda amandava (Linnaeus)

Plate IV, 6

INTRODUCTION : According to *SYNOP* 2 this Munia has not been recorded south of Madura. A.P.Jairaj reported that he saw 5 males and 3 females in the 'Kole' fields near Trichur on 14-10-1988. CSK found a male in breeding plumage at Kattampally on 12-10-1991. The bird was carrying strands of grass to a nest under construction in a clump of grass on a bund. He had found the Blackheaded Munia's nest on the same bund before 1991, but although there were some Blackheaded Munias at that place on 12-10-91 also, he could not find any nest.

P.K.Ravindran and C.K.Sujithkumar have also reported this bird form the Nedumpuzha 'Kole' fields near Trichur. On 22-9-'91 Sujithkumar saw a group of five in the Anakkal swamp in the Parambikulam WL Sanctuary. K.S.Appukuttan of the Sanctuary staff told him that others had also met with the Red Munia in the Sanctuary. On 16-2-'92 V.Santharam saw 4 in the paddy fields in Manakkodi 'Kole' lands near Trichur. Of these one was in breeding plumage. Susanthkumar saw 2 on the same day in Mooloor Kayal c. 10 km from Trichur town.

On 16-2-'92, in the course of a bird-survey of the 'Kole lands' of the Trichur-Ponnani areas organized by NEST (Nature Education Society of Trichur) in which C.Perennou of IWRB, V.Santharam, Andrew Robertson, C.Sashikumar and 25 other birdwatchers took part, some teams came across this bird in small flocks in the Mooloor Kayal and the Adat area. A total of c. 20 was recorded (prs. comm. from C.Susanthkumar and P.K.Ravindran). During the 1993 waterfowl census of the 'Kole'on 10-1, PKU, B.Sreekumar and Rafeeq saw a nest with two eggs at Enamavu.Thus SA's prediction (p.426, *BOK*) has been proved true.

REFERENCES : *BOK* 246; *Hbk* **10:** 101-103; *Pic.G:* 98(9); *PHIB:* 216-17; *FG B SEA* (No.1147; p.426); *Bs.of Sn.I:*101-2

MALAYALAM NAME : ചുവന്ന മുനിയ; *Chuvanna moonia.*

DESCRIPTION : Sparrow-; length 10 cm . (3 in.)

Typical munia with thick conical bill and short rounded tail. Male and female have red bills, red eyes and crimson upper tail-coverts, white-tipped black tails; legs orange-flesh. Breeding male mostly crimson with white spots on dark brown wings and crimson underparts. Female and winter male have red bills, red upper tail-coverts, brown upper parts with white spots on wings; underparts brownish-buff with brighter buff throat and belly (*Hbk:*'belly saffron-yellow.') Nonbreeding male has throat and breast greyer than the female. Immature birds resemble the female, but upper tail-coverts brown, and spotting on wings obscure; belly buff.

HABITS : According to Baker and Inglis (p.101) "essentially a hill bird", but KKN has seen it at sea level on the banks of the Godavari at Rajamundry (Andhra Pradesh) and the Kerala records are also from the coastal plains. According to *Hbk*, it has a preference for swampy grassland and sugarcane fields; also found in reeds near marshes, jheels and canals, and bushes near cultivation. Keeps in small flocks upto 30 (Baker & Inglis: 'hundreds together') often with the other munias, feeding on grassheads or on the ground. Feeds on insects also, e.g.winged termites. Roosts in large flocks in reedbeds and sugarcane fields. Call: a series of high-pitched chirps uttered in flight and a husky squeak; song, a continuous twittering. Status uncertain. Uncommon resident?

BREEDING : See paragraph 1 above. Season said to be irregular; perhaps mostly during the rains. Nest: the usual munia type, a ball of grass with a side-entrance, placed low down in some thorny bush.

1965 GREEN MUNIA ?

Estrilda formosa (Latham)

Plate IV, 5

INTRODUCTION : Alan H.Morley, a British birdwatcher who spent six months (September '90 to February '91) at the Gurukulam Botanical Sanctuary in Peria, North Wynad, says, that he met with "small parties of 3 to 6 birds on footpaths and open hillsides in October, November and early December. An unmistakable bird, and the barring on the flanks shows up well".

In view of the listing of this bird in the *Red Data Book* of ICBP we are including the bird in this book although no other birdwatcher seems to have come across this munia in Wynad.

REFERENCES : *Hbk* **10:**103-4. Not included in *Bs.of Sn.Ind.*

DESCRIPTION : Size Sparrow-; length c. 10 cm (4 in.). Male: above, olive-green. Tail blackish brown. Below, throat pale yellow; breast, centre of belly and under tail-coverts bright yellow. Flanks barred with olive-brown and white. Female, similar to male but browner above, duller and paler below, flanks with fewer and obsolete bars. In both sexes bill red; legs and feet slaty to fleshy brown; iris brown.

HABITS : Feeds on the ground and flies up into grass and low bushes when disturbed. In the non-breeding season seen in flocks of upto 50 birds. Keeps up a distinctive *swee swee*. Also feeble cheeps. (*Hbk*) There are no other records of this very distinctively coloured munia from the southern

States. On its distribution, habitat and status the *HANDBOOK* says, "An endemic species. Resident, very locally and unevenly ditributed; on the whole rather scarce. Mainly central India from Mt.Abu, Gwalior, Jhansi, Surguja south to Mahabaleswar, Utnur (Adilabad Dist., Andhra) and Vishakapatnam Ghats. Also recorded form Lucknow and Lahore. Specimens from 'Bihar' in the British Museum. Affects grass and low bushes, tall grassland, sugarcane fields and boulder-strewn scrub jungle."

[3? GREAT CRESTED GREBE?

Podiceps cristatus cristatus (Linnaeus)?

INTRODUCTION : In his letter dated 6-11-'91 to KKN, D.N.Kurup wrote that on 1-12-'88 he saw a single bird of this species in winter plumage at Kattampalli. He could observe it closely as it was not at all shy. He sent also a sketch of the bird he saw and the sketch agrees with those given in the *PICTORIAL GUIDE* (I:3 W) and plate I in *FG BBE* . However, CSK and others who have been visiting Kattampalli frequently since 1981 do not seem to have come across this bird.

According to *Hbk* (**I**:3) the southernmost records are from Orissa on the east and Gujarat on the west. D.N.Kurup's record, therefore, needs confirmation.

DESCRIPTION : Size slightly smaller than domestic duck (length c. 50 cm. or c. 19 in.) A large, 'tail-less' grebe with gleaming white underparts, long slender neck which is held erect, and pointed pinkish bill. Above, greyish-brown. A white wing-patch (secondaries) and white leading edge of wing (not visible at rest), conspicuous in flight. Blackish ear-tufts (much reduced in winter plumage). In winter looks white-headed with dark crown and prominent white stripe over eye. In breeding plumage male develops a 'ruff' or frill of elongated black and chetnut feathers below head.

The rather similar Rednecked Grebe (*Hbk* No.3a), a much rarer bird in India, is smaller (c. 45 cm. or 17 in.), has thicker neck and no white eye-stripe. The black of its crown extends down to eye level; sides of head dusky grey diffusing into white of throat and breast, the two colours not sharply demarcated as in the Great Crested Grebe. Base of bill yellow, not pinkish.

Seen singly, in pairs or small scattered parties in lakes, rivers and coastal waters.]

469 BLACKNAPED TERN

Sterna sumatrana Raffles

INTRODUCTION : Two races occur within Indian limits. The nominate race *sumatrana* breeds in Andaman and Nicobar islands (May-July) and in winter 'may occur in Khulna Sundarbans of E Pakistan and West Bengal'; *mathewsi* breeds in the Maldive Islands (June-July), but has not been recorded in Ceylon or along the western coast of the Peninsula, according to the *Hbk*.

Ole F. Jakobsen saw 8 feeding near the shore at Fort Cochin on 5-5-1990. He was familiar with this tern from Pacific Ocean.

REFERENCES : *Hbk* 3:56,57; *FG B SEA*:163

DESCRIPTION : Almost white looking pelagic tern with deeply forked tail and black legs and bill. A black band from eyes around nape distinctive. Upperparts pearly grey; underparts white with pinkish flush in breeding season. 'In winter, black nuchal band narrower and less prominent. '-*Hbk*. Immature birds has less distinct black band, black scaled upperparts and blackish carpal bar. Call : 'high-pitched *keeyic* or *kee* often repeated 3 or 4 times; lower sharp *kik-kik* - (Darnell)' - *FG B SEA*

HABITS : Exclusively marine. According to *Hbk*, food chiefly fish caught by plunging, but P.Harrison (*SEABIRDS*) says that it feeds skimming low over open sea or shallow lagoons, snatching at surface prey.

THE END

ഒത്തുചേരുന്നു ജീവിതം തന്നിൽ
സത്യവും പൊയ്യുമാവിധം തമ്മിൽ
എങ്ങുമീശ്വരൻ തീർപ്പതിൽ സ്വന്തം
തൊങ്ങൽ കൂട്ടിയിണക്കുന്നു മർത്ത്യൻ

– ചങ്ങമ്പുഴ

ADDITIONAL INFORMATION

26 LARGE CORMORANT

Phalacrocorax carbo

Manoj V. Nair saw 4 on 3-7-'92 at Akkulam, out of which 3 were juveniles. The adult had white thigh-patches. He again saw one juvenile at the same place on 19-6-'93. P.K. Ravindran and P.V. Prabhakaran reported that some pairs nested at Chimmony WL Sanctuary in March 1993. Jafer Palot, with Andrew Robertson saw 3(1 adult and 2 juveniles) at Chimmony on 5-2-'93.

55 LITTLE BITTERN

Ixobrychus minutus

On 31-1-'92, at Akkulam, Manoj V. Nair saw a small bittern, which he believes to be of this species, among pandanus clumps. He saw one again on 12-4-'93 and also on a couple of occasions later at the same place. All these birds were males.

93 PINTAIL

Anas acuta

During a bird survey of the Vembanad Lake on 8,9-1-'93 organised by NEST in which several birdwatchers of Kerala participated, thousands of Pintails were seen around Pathiramanal.

380 INDIAN LITTLE RINGED PLOVER

Charadrius dubius

One nest with 3 eggs was seen at Pallam on 3-4-'93 during a bird-survey at R.Bharathapuzha. The survey was organised by KEKA Nature Preservation Society, Trichur.

417 TEMMINCK'S STINT

Calidris temminckii

V.Santharam saw at least 4 on 10-1-'93 in the 'Kole' wetlands near Trichur. CSK has been seeing this Stint at Matakkara in small numbers (1 to 8) almost every winter since 1986. Several were seen along R. Bharathapuzha on 3,4-4-'93 during the bird survey organised by KEKA Nature Preservation Society, Trichur.

434 CRAB PLOVER

Dromas ardeola

During the winter months of 1991-'92 and 1992-'93 one adult Crab Plover was seen at Matakkara regularly. (CSK)

443 LARGE INDIAN (ORIENTAL) PRATINCOLE

Glareola pratincola

About 25 pairs nested at Kattampally from March to June 1993. (CSK) On 14-6-'93 Jafer Palot saw two roosting at Madayipara along with Lesser Sand Plovers, Little Ringed Plovers etc.

463 RIVER TERN

Sterna aurantia

In *Birds of Periyar*, AR & MCAJ mention of a single sight record in May 1986 by V. Santharam. Jafer Palot saw single River Terns at Periyar lake on 9-9-'91, 10-12-'92 and 24-2-'93. He, with Andrew Robertson and P.V. Prabhakaran saw one at Chimmony Reservoir on 5-2-'93.

617 PENINSULAR SCOPS OWL

Otus scops

In Oct. 1991, C.Susanthkumar, with P.S.Sivaprasad saw two at Naykkatti, Wynad. The birds came very close to the observers on hearing the replay of their call on tape-recorder. Manoj V.Nair heard these owls calling in the night at Neyyar and Peppara W L Sanctuaries in 1992-'93.

922 CLIFF SWALLOW

Hirundo fluvicola

Manoj V. Nair saw 4 hawking insects along with numerous House Swallows at Ponkalappara, (1400m above MSL) Neyyar W L Sanctuary on 24-2-'93.

930 EUROPEAN HOUSE MARTIN

Delichon urbica

On 27-12-'92, at Periyar WL Sanctuary, Manoj V. Nair saw 2, hawking insects with a group of Common Swallows.

997-1001 STARLING

Sturnus vulgaris Linnaeus

Of the five races of *S.vulgaris, poltaratskyi* occurs as a winter visitor south to Madhya Pradesh. "Vagrants and stragglers liable to be met in far-flung localities, thus two reccorded from Madras (Whistler, *JBNHS:*36-587) and three collected from a flock of c.12 near Bombay, November (Abdulali, ibid 62:161). Sight record at sea (subsp.?) c.40 miles west of Minicoy island in December - January (Philips *JBNHS* 60:582) "-*Hbk.*Salim Ali cautions that two or more races may occur

in the same flock, but racial identification impossible unless specimen in hand; sight records equivocal.

PON reported the sighting of a single Starling sitting on the stalk of a tall grass beside a canal running through wet paddy fields at Enamavu 'Kole', Trichur Dt., on 19-11-1988. He also informed that on 10-1-1993, in the course of the Waterfowl Census, PKU and fellow birdwatchers saw a group of 20+at the same area.

Slightly smaller than Common Myna, black glossed with red, purple, blue and green; yellow bill and brown legs. 'Feathers on head, neck and breast pointed and hackle-shaped' Female duller. In winter plumage, upperparts spotted with buff and underparts heavily spotted with white; bill brown. Gregarious. Found in open country, cultivation and marsh lands.

REFERENCES : *Hbk* **5**: 116-172; *PHIB* : 194; *FGBSEA* : No. 1088, p 408.

1882 YELLOWHEADED WAGTAIL

Motacilla citreola

Manoj V. Nair saw one on 11-10-'92 at Anamukham, near Akkulam (Trivandrum).

1964 RED MUNIA

Estrilda amandava

On 14-8-'92, Jafer Palot saw 2 near the lake, Periyar WL Sanctuary. On 11-7-'93, C.Susanthkumar saw several at Punchakkari (Trivandrum). Manoj V. Nair saw 200+ at the same place on 1-8-'93; about 40% of these were males in breeding plumage. This species has been recorded at Akkulam also.

APPENDIX - I

CHECKLIST OF THE BIRDS OF KERALA

This Checklist contains all the species and subspecies included in Dr.Salim Ali's BIRDS OF KERALA and the present work. Some subspecies whose distribution range includes Kerala according to *SYNOPSIS 2* have been added. We know that some of the birds whose habitat is the drier parts of former southern Travancore may not be found within the boundaries of present Kerala State;but we have retained them in the list.

Trinomials are based on the distribution of subspecies given in *SYNOPSIS 2*. The second figure in the list after serial number refers to the serial number in *SYNOPSIS 2*. Occurrence of species bracketed [.....] needs confirmation,though they too have been serial numbered.

We have not attempted to include any information regarding the movements, relative abundance,breeding status etc. within the State mainly due to lack of sufficient authentic information.

Almost all Malayalam names coined by Shri N.G.Pillai in *BOK* are retained. Names given by Prof.K.K.Neelakantan in *Keralathile Pakshikal* have also been used. In some cases, we have coined new names and also have adopted names used by *Mānnān* tribals of Periyar, and *Kāni* tribals of Neyyar and Peppara, lists of which were supplied by Jafer Palot and Manoj V. Nair respectively. We believe that there is much scope for improvement in this regard and as several species still remain unnamed, suggestions are most welcome.

Editors

Sl.No.	SYN.No.	Common name, Scientific name & Malayalam name
		Order PODICIPEDIFORMES
		Family PODICIPEDIDAE: Grebes
1	[3?	Great Crested Grebe?
		Podiceps cristatus cristatus (Linnaeus)?]
2	5	Little Grebe മുങ്ങാങ്കോഴി
		Podiceps ruficollis capensis Salvadori
		Order PROCELLARIFORMES
		Family PROCELLARIIDAE : Shearwaters, Petrels
3	12	Persian Shearwater
		Procellaria lherminieri persica (Hume)
		Family HYDROBATIDAE: Storm Petrels
4	[14	Wilson's Storm Petrel
		Oceanites oceanicus oceanicus (Kuhl)]

Order PELECANIFORMES

Family PHAETHONTIDAE : Tropic-birds

5 17 Redbilled or Short-tailed Tropic-bird
Phaethon aethereus indicus Hume

Family PELICANIDAE : Pelicans

6 21 Grey or Spottedbilled Pelican പുള്ളിച്ചുണ്ടൻ പെലിക്കൻ, കൊതുമ്പന്നം
Pelecanus philippensis philippensis Gmelin

Family SULIDAE : Boobies

7 23 Masked Booby
Sula dactylatra melanops Heuglin

8 25 Brown Booby
Sula leucogaster plotus (Forster)

Family PHALACROCORACIDAE : Cormorants and Snake-bird

9 26 Large Cormorant വലിയ നീർക്കാക്ക.
Phalacrocorax carbo sinensis (Shaw)

10 27 Shag കിന്നരി നീർക്കാക്ക.
Phalacrocorax fuscicollis Stephens.

11 28 Little Cormorant ചെറിയ നീർക്കാക്ക.
Phalacrocorax niger (Vieillot).

12 29 Darter or Snake-bird. ചേരക്കോഴി.
Anhinga rufa melanogaster Pennant.

Family FREGATIDAE : Frigate Brids

13 31 Lesser Frigate Bird
Fregata minor aldabrensis Mathews

14 32 Least Frigate Bird
Fregata ariel iredalei Mathews

Order CICONIIFORMES

Family ARDEIDAE : Herons, Egrets and Bitterns

15 36 Grey Heron ചാരമുണ്ടി.
Ardea cinerea rectirostris Gould.

16 37 Purple Heron ചായമുണ്ടി.
Ardea purpurea manilensis Meyen.

17 46 Large Egret പെരുമുണ്ടി.
Ardea alba modesta J.E.Gray.

18 38 Little Green Heron ചിന്നക്കൊക്ക്.
Ardeola striatus chloriceps (Bonaparte)

19	42	Pond Heron or Paddy Bird കുളക്കൊക്ക്. *Ardeola grayii grayii* (Sykes).
20	44	Cattle Egret കാലിമുണ്ടി. *Bubulcus ibis coromandus* (Boddaert)
21	47,48	Smaller Egret ചെറുമുണ്ടി. *Egretta intermedia intermedia* (Wagler).
22	49	Little Egret ചിന്നമുണ്ടി. *Egretta garzetta garzetta* (Linnaeus)
23	50	Indian Reef Heron തിരമുണ്ടി. *Egretta gularis schistacea* (Hemprich & Ehrenberg).
24	52	Nigh Heron പാതിരാക്കൊക്ക്. *Nycticorax nycticorax nycticorax* (Linnaeus)
25	53	Malay or Tiger Bittern കാട്ടുകൊക്ക്. *Gorsachius melanolophus melanolophus* (Raffles)
26	[55?	Little Bittern ? ചെറുകൊച്ച. *Ixobrychus minutus minutus* (Linnaeus) ?]
27	56	Chestnut Bittern മഴക്കൊച്ച. *Ixobrychus cinnamomeus* (Gmelin)
28	57	Yellow Bittern മഞ്ഞക്കൊച്ച. *Ixobrychus sinensis* (Gmelin)
29	58	Black Bittern കരിങ്കൊച്ച *Ixobrychus flavicollis flavicollis* (Latham)

Family CICONIIDAE : Storks

30	60	Painted Stork വർണ്ണക്കൊക്ക് *Mycteria leucocephala* (Pennant)
31	61	Openbill Stork ചേരാക്കൊക്കൻ *Anastomus oscitans* (Boddaert)
32	62	Whitenecked Stork കരുവാരക്കുരു *Ciconia episcopus episcopus* (Boddaert)
33	63	White Stork വെൺബകം. *Ciconia ciconia ciconia* (Linnaeus)
34	65	Black Stork കരിമ്പകം *Ciconia nigra* (Linnaeus)
35	68	Lesser Adjutant Stork വയൽ നായ്ക്കൻ *Leptoptilos javanicus* (Horsfield)

Family THRESKIORNITHIDAE : Ibises & Spoonbills

36	69	White Ibis വെള്ള ഐബിസ് *Threskiornis aethiopica melanocephala* (Latham)
37	70	Black Ibis ചെന്തലയൻ ഐബിസ് *Pseudibis papillosa papillosa* (Temminck)
38	71	Glossy Ibis ചെമ്പൻ ഐബിസ് *Plegadis falcinellus falcinellus* (Linnaeus)

39	72	Spoonbill ചട്ടുകക്കൊക്കൻ *Platalea leucorodia major* Temminck & Schlegel

Family PHOENICOPTERIDAE : Flamingos

40	73	The Flamingo or Greater Flamingo വലിയ പൂനാര, വലിയ രാജഹംസം. *Phoenicopterus roseus* Pallas

Order ANSERIFORMES

Family ANATIDAE : Ducks, Geese

41	82	Barheaded Goose കുറിത്തലയൻ വാത്ത്. *Anser indicus* (Latham)
42	88	Lesser Whistling Teal ചൂളാൻ എരണ്ട. *Dendrocygna javanica* (Horsfield)
43	[89	Large Whistling Teal *Dendrocygna bicolor* (Vieillot)]
44	90	Ruddy Shelduck, Brahminy Duck തങ്കത്താറാവ്. *Tadorna ferruginea* (Pallas)
45	93	Pintail വാലൻ എരണ്ട. *Anas acuta* Linnaeus
46	94	Common Teal പട്ടക്കണ്ണൻ എരണ്ട. *Anas crecca crecca* Linnaeus
47	97	Spotbill Duck പുള്ളിച്ചുണ്ടൻ താറാവ്. *Anas poecilorhyncha poecilorhyncha* J.R.Forster
48	101	Gadwall ഗ്യാഡ്വാൾ എരണ്ട. *Anas strepera strepera* Linnaeus
49	104	Garganey വരിഎരണ്ട. *Anas querquedula* Linnaeus
50	109	White-eyed Pochard or Ferruginous Duck വെള്ളക്കണ്ണി എരണ്ട. *Aythya nyroca* (Guldenstadt)
51	114	Cotton Teal പച്ച എരണ്ട. *Nettapus coromandelianus coromandelianus* (Gmelin)
52	115	Comb Duck മുഴയൻ താറാവ്. *Sarkidiornis melanotos melanotos* (Pennant)

Order FALCONIFORMES

Family ACCIPITRIDAE : Hawks, Vultures

53	124	Blackwinged Kite വെള്ളി എറിയൻ, വെള്ളൂരാൻ *Elanus caeruleus vociferus* (Latham)
54	126	Legge's Baza *Aviceda jerdoni ceylonensis* (Legge)

55	127	Indian Blackcrested Baza *Aviceda leuphotes leuphotes* (Dumont)
56	130	Crested Honey Buzzard തേൻ കൊതിച്ചിപ്പരുന്ത്. *Pernis ptilorhyncus ruficollis* Lesson
57	133	Pariah or Black Kite ചക്കിപ്പരുന്ത്. *Milvus migrans govinda* Sykes
58	135	Brahminy Kite കൃഷ്ണപ്പരുന്ത്. *Haliastur indus indus* (Boddaert)
59	139	Shikra പ്രാപ്പിടിയൻ, ഷിക്ര. *Accipiter badius badius* (Gmelin)
60	145	Crested Goshawk മലമ്പുള്ള്. *Accipiter trivirgatus peninsulae* Koelz
61	147	Sparrow-Hawk *Accipter nisus nisosimilis* (Tickell)
62	151	Besra Sparrow-Hawk ബെസ്റാ പ്രാപ്പിടിയൻ. *Accipiter virgatus besra* Jerdon
63	156	Buzzard *Buteo buteo japonicus* (Temminck & Schlegel)
64	157	White-eyed Buzzard-Eagle *Butastur teesa* (Franklin)
65	159	Legge's Hawk-Eagle *Spizaetus nipalensis kelaarti* Legge
66	161	Crested Hawk-Eagle കിന്നരിപ്പരുന്ത്; കൂവിലാൻ. *Spizaetus cirrhatus cirrhatus* (Gmelin)
67	163	Bonelli's Eagle *Hieraaetus fasciatus fasciatus* (Vieillot)
68	164	Booted Hawk-Eagle *Hieraaetus pennatus* (Gmelin)
69	165	Rufousbellied Hawk-Eagle എറിയൻ. *Hieraaetus kienerii kienerii* (E.Geoffroy)
70	172	Black Eagle കരിമ്പരുന്ത്. *Ictinaetus malayensis perniger* (Hodgson)
71	172a	Whitetailed Eagle വെള്ളവാലൻ മീൻപരുന്ത്. *Haliaeetus albicilla* (Linnaeus)
72	173	Whitebellied Sea Eagle വെള്ളവയറൻ കടൽപ്പരുന്ത്. *Haliaeetus leucogaster* (Gmelin)
73	175	Greyheaded Fishing Eagle മീൻ പരുന്ത്, ആലാവ്. *Ichthyophaga ichthyaetus ichthyaetus* (Horsfield)
74	178	King or Indian Black Vulture കാതിലക്കഴുകൻ. *Sarcogyps calvus* (Scopoli)
75	179	Cinereous Vulture കറുത്ത കഴുകൻ. *Aegypius monachus* (Linnaeus)
76	182	Longbilled Vulture തവിട്ടുകഴുകൻ. *Gyps indicus indicus* (Scopoli)

77	185	Indian Whitebacked Vulture ചുട്ടിക്കഴുകൻ. *Gyps bengalensis* (Gmelin)
78	187	Egyptian or Scavenger Vulture തോട്ടിക്കഴുകൻ. *Neophron percnopterus ginginianus* (Latham)
79	190	Pale Harrier മേടുതപ്പി. *Circus macrourus* (S.G.Gmelin)
80	191	Montagu's Harrier *Circus pygargus* (Linnaeus)
81	192	Pied Harrier വെള്ളക്കറുപ്പൻ മേടുതപ്പി. *Circus melanoleucos* (Pennant)
82	193	Marsh Harrier കരിതപ്പി. *Circus aeruginosus aeruginosus* (Linnaeus)
83	195	Short-toed Eagle *Circaetus gallicus gallicus* (Gmelin)
84	197	Crested Serpent Eagle ചുട്ടിപ്പരുന്ത്. *Spilornis cheela melanotis* (Jerdon)
85	203	Osprey താലിപ്പരുന്ത്. *Pandion haliaetus haliaetus* (Linnaeus)

Family FALCONIDAE : Falcons

86	208	Laggar Falcon *Falco biarmicus jugger* J.E.Gray
87	209	Peregrine Falconകായൽപ്പുള്ള്. *Falco peregrinus japonensis* Gmelin
88	211	Shahin Falcon കരിമ്പുള്ള്. *Falco peregrinus peregrinator* Sundevall
89	214	Oriental Hobby ചെമ്പുള്ള്. *Falco severus rufipedoides* Hodgson
90	219	Redheaded Merlin ചെന്തലയൻ പുള്ള്. *Falco chicquera chicquera* Daudin
91	222	Kestrel ചെറുപുള്ള്. *Falco tinnunculus tinnunculus* Linnaeus
92	224	Indian Kestrel വിറയൻ പുള്ള്. *Falco tinnunculus objurgatus* (Baker)

Order GALLIFORMES

Family PHASIANIDAE : Pheasants, Partridges, Quails

93	246	Grey Partridge കോഴിക്കാട. *Francolinus pondicerianus pondicerianus* (Gmelin)
94	[250 ?	Grey Quail ? ചാരക്കാട. *Coturnix coturnix coturnix* (Linnaeus) ?]
95	252	Blackbreasted or Rain Quail കരിമാറൻ കാട. *Coturnix coromandelica* (Gmelin)

96 253 Bluebreasted Quail നീലമാറൻ കാട.
Coturnix chinensis chinensis (Linnaeus)

97 257 Jungle Bush Quail പൊന്ത വരിക്കാട.
Perdicula asiatica vidali Whistler & Kinnear

98 261 Rock Bush Quail പാറവരിക്കാട.
Perdicula argoondah salimalii Whistler

99 262 Painted Bush Quail മേനിക്കാട
Perdicula erythrorhyncha erythrorhyncha (Sykes)

100 275 Red Spurfowl തവിട്ടുതലയൻ കാട്ടുകോഴി (മുള്ളൻ കോഴി).
Galloperdix spadicea spadicea (Gmelin)

101 277 Travancore Red Spurfowl മുള്ളൻ കോഴി.
Galloperdix spadicea stewarti Baker

102 278 Painted Spurfowl പുള്ളി മുള്ളൻ കോഴി.
Galloperdix lunulata (Valenciennes)

103 301 Grey Junglefowl കാട്ടുകോഴി.
Gallus sonneratii Temminck

104 311 Common Peafowl മയിൽ.
Pavo cristatus Linnaeus

Order GRUIFORMES

Family TURNICIDAE : Bustard-Quails

105 313 Little Bustard-Quail പാഞ്ചാലിക്കാട.
Turnix sylvatica dussumier (Temminck)

106 314 Yellowlegged Button Quail
Turnix tanki tanki Blyth

107 318 Common Bustard-Quail
Turnix suscitator taigoor (Sykes)

Family RALLIDAE : Rails, Coots

108 329 Bluebreasted Banded Rail നീലമാറൻ കുളക്കോഴി.
Rallus striatus albiventer Swainson

109 332 Banded Crake തവിടൻ നെല്ലിക്കോഴി.
Rallina eurizonoides amauroptera (Jerdon)

110 340 Ruddy Crake ചുവന്ന നെല്ലിക്കോഴി.
Porzana fusca zeylonica (Baker)

111 337 Baillon's Crake ചെറിയ നെല്ലിക്കോഴി.
Porzana pusilla pusilla (Pallas)

112 343,344 Whitebreasted Waterhenകുളക്കോഴി.
Amaurornis phoenicurus phoenicurus (Pennant)

113 346 Kora or Watercock തിപ്പൊരിക്കണ്ണൻ.
Gallicrex cinerea (Gmelin)

114 347 Indian Moorhen പട്ടക്കോഴി.
Gallinula chloropus indica Blyth

115	349	Purple Moorhen നീലക്കോഴി. *Porphyrio porphyrio poliocephalus* (Latham)
116	350	Coot വെള്ളക്കൊക്കൻ കുളക്കോഴി. *Fulica atra atra* Linnaeus

Family OTIDIDAE : Bustards

117	355	Houbara ഹൗബാര; മരുക്കൊക്ക്. *Chlamydotis undulata macqueenii* (J.E.Gray)
118	357	Lesser Florican or Likh ചാട്ടക്കോഴി. *Sypheotides indica* (J.F.Miller)

Order CHARADRIIFORMES

Family JACANIDAE : Jacanas

119	358	Pheasant-tailed Jacana വാലൻ താമരക്കോഴി. *Hydrophasianus chirurgus* (Scopoli)
120	359	Bronzewinged Jacana നാടൻ താമരക്കോഴി. *Metopidius indicus* (Latham)

Family HAEMATOPODIDAE : Oystercatchers

121	360	Oystercatcher കടൽ മണ്ണാത്തി. *Haematopus ostralegus* [? *ostralegus* Linnaeus]

Family ROSTRATULIDAE : Painted Snipe

122	429	Painted Snipe കാളിക്കാട. *Rostratula benghalensis benghalensis* (Linnaeus)

Family RECURVIROSTRIDAE : Stilts, Avocets

123	430	Blackwinged Stilt പവിഴക്കാലി, ഈർക്കിലിക്കാലൻ. *Himantopus himantopus himantopus* (Linnaeus)
124	432	Avocet അവോസെറ്റ്. *Recurvirostra avosetta* Linnaeus

Family DROMADIDAE : Crab Plover

125	434	Crab Plover ഞണ്ടുണ്ണി. *Dromas ardeola* Paykull

Family BURHINIDAE : Stone Curlews, Thick-Knees

126	436	Stone Curlew വയൽക്കണ്ണൻ. *Burhinus oedicnemus indicus* (Salvadori)
127	437	Great Stone Plover പെരുങ്കൊക്കൻ പ്ലവർ. *Esacus magnirostris recurvirostris* (Cuvier)

Family GLAREOLIDAE : Coursers, Pratincoles

128	440	Indian Courser *Cursorius coromandelicus* (Gmelin)

129	443	Large Indian (Oriental) Pratincole or Swallow-Plover വലിയ മീവൽക്കാട. *Glareola pratincola maldivarum* J.R.Forster
130	444	Small Indian Pratincole or Swallow-Plover ചെറിയ മീവൽക്കാട. *Glareola lactea* Temminck

Family CHARADRIIDAE
Subfamily CHARADRIINAE : Plovers

131	363	Sociable Lapwing *Vanellus gregarius* (Pallas)
132	366	Redwattled Lapwing ചെങ്കണ്ണി തിത്തിരി. *Vanellus indicus indicus* (Boddaert)
133	370	Yellow-wattled Lapwing മഞ്ഞക്കണ്ണി തിത്തിരി. *Vanellus malabaricus* (Boddaert)
134	371	Grey or Blackbellied Plover ചാരപ്ലവർ. *Pluvialis squatarola* (Linnaeus)
135	373	Eastern Golden Plover പൊൻമണൽക്കോഴി. *Pluvialis dominica fulva* (Gmelin)
136	374	Large Sand Plover വലിയ മണൽക്കോഴി. *Charadrius leschenaultii leschenaultii* Lesson
137	379	Little Ringed Plover ആറ്റുമണൽക്കോഴി. *Charadrius dubius curonicus* Gmelin
138	380	Indian Little Ringed Plover ആറ്റുമണൽക്കോഴി. *Charadrius dubius jerdoni* (Legge)
139	381	Kentish Plover ചെറുമണൽക്കോഴി. *Charadrius alexandrinus alexandrinus* Linnaeus
140	384	Lesser Sand Plover പാമീർ മണൽക്കോഴി. *Charadrius mongolus atrifrons* Wagler
141	385	Whimbrel തെറ്റിക്കൊക്കൻ. *Numenius phaeopus phaeopus* (Linnaeus)
142	388	Curlew വാൾക്കൊക്കൻ. *Numenius arquata orientalis* C.L.Brehm
143	389	Blacktailed Godwit പട്ടവാലൻ ഗോഡ്‌വിറ്റ്. *Limosa limosa limosa* (Linnaeus)
144	391	Bartailed Godwit വരവാലൻ ഗോഡ്‌വിറ്റ്. *Limosa lapponica lapponica* (Linnaeus)
145	393,394	Common Redshank ചോരക്കാലി. *Tringa totanus totanus* (Linnaeus)
146	395	Marsh Sandpiper ചതുപ്പൻ *Tringa stagnatilis* (Bechstein)
147	396	Greenshank പച്ചക്കാലി. *Tringa nebularia* (Gunner)
148	397	Green Sandpiper കരിമ്പൻ കാടക്കൊക്ക്. *Tringa ochropus* Linnaeus

149	398	Wood Sandpiper പുള്ളിക്കാടക്കൊക്ക് *Tringa glareola* Linnaeus
150	400	Terek Sandpiper ടെറക്ക് മണലൂതി. *Tringa terek* (Latham)
151	401	Common Sandpiper നീർക്കാട. *Tringa hypoleucos hypoleucos* Linnnaeus
152	402	Turnstone കല്ലുരുട്ടിക്കാട. *Arenaria interpres interpres* (Linnaeus)
153	405	Wood Snipe കാട്ടുചുണ്ടൻ കാട. *Gallinago nemoricola* Hodgson
154	406	Pintail Snipe മുൾവാലൻ ചുണ്ടൻ കാട. *Gallinago stenura* (Bonaparte)
155	407	Swinhoe's Snipe സ്വിൻഹോ ചുണ്ടൻകാട. *Gallinago megala* Swinhoe
156	409	Fantail Snipe വിശറിവാലൻ ചുണ്ടൻ കാട. *Gallinago gallinago gallinago* (Linnaeus)
157	410	Jack Snipe ചെറിയ ചുണ്ടൻ കാട. *Gallinago minima* (Brunnich)
158	411	Woodcock പ്രാക്കാട. *Scolopax rusticola rusticola* Linnaeus
159	413	Eastern Knot കിഴക്കൻ നട്ട്. *Calidris tenuirostris* (Horsfield)
160	414	Sanderling തിരക്കാട. *Calidris alba* (Pallas)
161	416	Little Stint കുരുവി മണലൂതി. *Calidris minuta* (Leisler)
162	417	Temminck's Stint ടെമ്മിങ്കി മണലൂതി. *Calidris temminckii* (Leisler)
163	420,421	Dunlin ഡൺലിൻ *Calidris alpina alpina* (Linnaeus)
164	422	Curlew Sandpiper കടൽക്കാട. *Calidris testacea* (Pallas)
165	423	Spoonbilled Sandpiper കരണ്ടിക്കൊക്കൻ മണലൂതി. *Eurynorhynchus pygmeus* (Linnaeus)
166	424	Broadbilled Sandpiper വരയൻ മണലൂതി. *Limicola falcinellus* [*falcinellus* (Pontoppidan)]
167	426	Ruff ബഹുവർണ്ണൻ മണലൂതി. *Philomachus pugnax* (Linnaeus)
		Family STERCORARIIDAE : Skuas
168	446	Antarctic Skua *Catharacta skua lonnbergi* Mathews
		Family LARIDAE : Gulls, Terns
169	450	Yellowlgged Herring Gull വെള്ള കടൽക്കാക്ക. *Larus argentatus heuglini* Bree

170	451	Pinklegged Herring Gull *Larus argentatus mongolicus* Sushkin
171	452	Lesser Blackbacked Gull കരിഞ്ചിറകൻ കടൽക്കാക്ക. *Larus fuscus fuscus* (Linnaeus)
172	453	Great Blackheaded Gull വലിയ കടൽക്കാക്ക. *Larus ichthyaetus* Pallas
173	454	Brownheaded Gull തവിട്ടുതലയൻ കടൽക്കാക്ക. *Larus brunnicephalus* Jerdon
174	455	Blackheaded Gull ചെറിയ കടൽക്കാക്ക. *Larus ridibundus ridibundus* Linnaeus
175	458	Whiskered Tern കരി ആള. *Chlidonias hybrida indicus* (Stephens)
176	460	Gullbilled Tern പാത്തക്കൊക്കൻ ആള. *Gelochelidon nilotica nilotica* (Gmelin)
177	462	Caspian Tern വലിയ ചെങ്കൊക്കൻ ആള. *Hydroprogne caspia caspia* (Pallas)
178	463	River Tern പുഴ ആള. *Sterna aurantia* J.E.Gray
179	464	Common Tern ചോരക്കാലി ആള. *Sterna hirundo* [subspecies ?] Linnaeus.
180	467	Whitecheeked Tern കടൽ ആള. *Sterna repressa* Hartert
181	470	Blackbellied Tern കരിവയറൻ ആള. *Sterna acuticauda* J.E.Gray
182	471,473	Brownwinged Tern തവിടൻ കടൽ ആള. *Sterna anaethetus* [*anaethetus* Scopoli]
183	474	Sooty Tern കറുത്ത കടൽ ആള. *Sterna fuscata nubilosa* Sparrman
184	477	Saunders's Little Tern ആളച്ചിന്നൻ. *Sterna saundersi* Hume
185	478	Large Crested Tern വലിയ കടൽ ആള. *Sterna bergii velox* Cretzschmar
186	479	Indian Lesser Crested Tern ചെറിയ കടൽ ആള. *Sterna bengalensis bengalensis* Lesson
187	480	Sandwich Tern കടലുണ്ടി ആള. *Sterna sandvicensis sandvicensis* Latham

Order COLUMBIFORMES

Family PTEROCLIDIDAE : Sandgrouse

188	487	Indian Sandgrouse മണൽപ്രാവ് *Pterocles exustus erlangeri* (Neumann)

Family COLUMBIDAE

189 496 Greyfronted Green Pigeon ചാരവരിയൻ പ്രാവ്.
Trenon pompadora affinis (Jerdon)

190 501 Orangebreasted Green Pigeon മഞ്ഞവരിയൻ പ്രാവ്.
Trenon bicincta bicincta (Jerdon)

191 504 Green Pigeon മഞ്ഞക്കാലി പച്ചപ്രാവ്.
Trenon phoenicoptera chlorigaster (Blyth)

192 507 Green Imperial Pigeon മേനിപ്രാവ്.
Ducula aenea pusilla (Blyth)

193 511 Jerdon's Imperial Pigeon പൊകണ, തെള്ളിപ്രാവ്.
Ducula badia cuprea (Jerdon)

194 517 Blue Rock Pigeon മാടപ്രാവ്, അമ്പലപ്രാവ്.
Columba livia intermedia Strickland

195 521 Nilgiri Wood Pigeon മരപ്രാവ്.
Columba elphinstonii (Sykes)

196 531 Western (?) Turtle Dove ചെങ്ങാലി പ്രാവ്.
Streptopelia orientalis [*meena* ? (Sykes)]

197 534 Indian Ring Dove പൊട്ടൻ ചെങ്ങാലി.
Streptopelia decaocto decaocto (Frivaldszky)

198 537 Spotted Dove അരിപ്രാവ്.
Streptopelia chinensis suratensis (Gmelin)

199 541 Little Brown Dove തവിടൻ പ്രാവ്.
Streptopelia senegalensis cambayensis (Gmelin)

200 542 Emerald or Bronzewinged Dove ഓമനപ്രാവ്.
Chalcophaps indica indica (Linnaeus)

Order PSITTACIFORMES

Family PSITTACIDAE : Parrots

201 [546 Large Indian or Alexandrine Parakeet
Psittacula eupatria eupatria (Linnaeus)]

202 550 Roseringed Parakeet നാട്ടുതത്ത.
Psittacula krameri manillensis (Bechstein)

203 558 Blossomheaded Parakeet പൂന്തത്ത.
Psittacula cyanocephala cyanocephala (Linnaeus)

204 564 Bluewinged Parakeet നീലത്തത്ത.
Psittacula columboides (Vigors)

205 566,567 Indian Lorikeet തത്തച്ചിന്നൻ.
Loriculus vernalis vernalis (Sparrman)

Order CUCULIFORMES

Family CUCULIDAE : Cuckoos

206 569 Redwinged Crested Cuckoo ഉപ്പൻ കുയിൽ.
Clamator coromandus (Linnaeus)

207	571	Pied Crested Cuckoo കൊമ്പൻ കുയിൽ. *Clamator jacobinus jacobinus* (Boddaert)
208	573	Common Hawk-Cuckoo or Brainfever Bird പേക്കുയിൽ. *Cuculus varius varius* Vahl
209	576	Indian Cuckoo ചക്കയ്ക്കുപ്പുണ്ടോ കുയിൽ. *Cuculus micropterus micropterus* Gould
210	578	The Cuckoo *Cuculus canorus canorus* Linnaeus
211	581	Smal Cuckoo ചിന്നക്കുയിൽ. *Cuculus poliocephalus poliocephalus* (Latham)
212	582	Indian Banded Bay Cuckoo ചെങ്കുയിൽ. *Cacomantis sonneratii sonneratii* (Latham)
213	584	Indian Plaintive Cuckoo ചെറുകുയിൽ. *Cacomantis passerinus* (Vahl)
214	588	Drongo Cuckoo കാക്കത്തമ്പുരാട്ടിക്കുയിൽ. *Surniculus lugubris dicruroides* (Hodgson)
215	590	Koel കരിങ്കുയിൽ (നാട്ടുകുയിൽ). *Eudynamys scolopacea scolopacea* (Linnaeus)
216	595	Small Greenbilled Malkoha പച്ചച്ചുണ്ടൻ. *Rhopodytes viridirostris* (Jerdon)
217	598	Sirkeer Cuckoo കള്ളിക്കുയിൽ. *Taccocua leschenaultii leschenaultii* Lesson
218	599	Redfaced Malkoha *Phaenicophaeus pyrrhocephalus* (Pennant)
219	602	Crow-Pheasant or Coucal ചെമ്പോത്ത്, ഉപ്പൻ. *Centropus sinensis parroti* Stresemann
220	605	Lesser Coucal വരി ഉപ്പൻ, പുല്ലുപ്പൻ *Centropus toulou bengalensis* (Gmelin)

Order STRIGIFORMES

Family STRIGIDAE : Owls

Subfamily TYTONINAE : Barn Owls

221	606	Barn Owl വെള്ളി മൂങ്ങ. *Tyto alba stertens* Hartert
222	608	Grass Owl പുൽമൂങ്ങ. *Tyto capensis longimembris* (Jerdon)
223	610a	Peninsular Bay Owl റിപ്ലി മൂങ്ങ. *Phodilus badius ripleyi* Hussain & Khan

Subfamily STRIGINAE : Owls

224	617	Peninsular Scops Owl സൈരന്ധ്രി നത്ത്. *Otus scops rufipennis* (Sharpe)
225	623	Collared Scops Owl ചെവിയൻ നത്ത്. *Otus bakkamoena bakkamoena* Pennant

226	627	Eagle-Owl or Great Horned Owl കൊമ്പൻ മൂങ്ങ. *Bubo bubo bengalensis* (Franklin)
227	628	Forest Eagle-Owl കാട്ടുമൂങ്ങ. *Bubo nipalensis nipalensis* Hodgson
228	631	Brown Fish Owl മീൻകൂമൻ. *Bubo zeylonensis leschenault* (Temminck)
229	637	Jungle Owlet ചെമ്പൻ നത്ത്. *Glaucidium radiatum malabaricum* (Blyth)
230	644	Brown Hawk Owl പുള്ളു നത്ത്. *Ninox scutulata hirsuta* (Temminck)
231	652	Spotted Owlet പുള്ളിനത്ത്. *Athene brama brama* (Temminck)
232	657	Mottled Wood Owl കാലങ്കോഴി. *Strix ocellata ocellata* (Lesson)
233	659,660	Brown Wood Owl കൊല്ലിക്കുറവൻ. *Strix leptogrammica indranee* Sykes
234	[663	Longeared Owl നെടുഞ്ചെവിയൻ മൂങ്ങ. *Asio otus* (Linnaeus)]
235	664	Shorteared Owl പൂച്ച മൂങ്ങ. *Asio flammeus flammeus* (Pontoppidan)

Order CAPRIMULGIFORMES

Family PODARGIDAE : Frogmouths

236	666	Ceylon Frogmouth മാക്കാച്ചിക്കാട. *Batrachostomus moniliger* Blyth

Family CAPRIMULGIDAE : Nightjars

237	669	Great Eared Nightjar ചെവിയൻ രാച്ചുക്കു. *Eurostopodus macrotis bourdilloni* (Hume)
238	671	Indian Jungle Nightjar കാട്ടുരാച്ചുക്കു. *Caprimulgus indicus indicus* Latham
239	676,677	Longtailed Nightjar രാച്ചൗങ്ങൻ. *Caprimulgus macrurus atripennis* Jerdon
240	680	Common Indian Nightjar നാട്ടുരാച്ചുക്കു. *Caprimulgus asiaticus asiaticus* Latham
241	682	Franklin's or Allied Nightjar ചുയി രാച്ചുക്കു. *Caprimulgus affinis monticolus* Franklin

Order APODIFORMES

Family APODIDAE : Swifts

Subfamily APODINAE : Swifts

242	685	Indian Edible-Nest Swiftlet ചിത്രകൂടൻ ശരപ്പക്ഷി. *Collocalia unicolor* (Jerdon)

243 691 Large Brownthroated Spinetail Swift വലിയ മുൾവാലൻ ശരപ്പക്ഷി.
Chaetura gigantea indica Hume

244 692 Whiterumped Spinetail ചെറിയ മുൾവാലൻ ശരപ്പക്ഷി.
Chaetura sylvatica (Tickell)

245 694 Alpine Swift വെള്ളവയറൻ ശരപ്പക്ഷി.
Apus melba nubifuga Koelz

246 700 Blyth's or Himalayan Whiterumped Swift ഹിമാലയൻ ശരപ്പക്ഷി.
Apus pacificus leuconyx (Blyth)

247 703 House Swift അമ്പലംചുറ്റി.
Apus affinis affinis (J.E.Gray)

248 707 Palm Swift പനങ്കൂളൻ.
Cypsiurus parvus balasiensis (J.E.Gray)

Subfamily HEMIPROCNINAE : Crested Swifts

249 709 Crested Swift കൊമ്പൻ ശരപ്പക്ഷി.
Hemiprocne longipennis coronata (Tickell)

Order TROGONIFORMES

Family TROGONIDAE : Trogons

250 711 Malabar Trogon തീക്കാക്ക.
Harpactes fasciatus malabaricus (Gould)

Order CORACIIFORMES

Family ALCEDINIDAE : Kingfishers

251 720 Travancore Pied Kingfisher പുള്ളിമീൻകൊത്തി.
Ceryle rudis trvancoreensis Whistler & Kinnear

252 724 Common Kingfisher ചെറിയ മീൻകൊത്തി.
Alcedo atthis taprobana Kleinschmidt

253 725 Blue-eared Kingfisher പൊടിപ്പൊന്മാൻ.
Alcedo meninting coltarti Baker

254 727 Threetoed Kingfisher മേനിപ്പൊന്മാൻ.
Ceyx erithacus erithacus (Linnaeus)

255 730 Storkbilled Kingfisher കാക്കമീൻകൊത്തി.
Pelargopsis capensis capensis (Linnaeus)

256 736 Whitebreasted Kingfisher മീൻകൊത്തിച്ചാത്തൻ.
Halcyon smyrnensis fusca (Boddaert)

257 739 Blackcapped Kingfisher കരിന്തലയൻ മീൻകൊത്തി.
Halcyon pileata (Boddaert)

258 740 Whitecollared Kingfisher കായൽപൊന്മാൻ.
Halcyon chloris vidali Sharpe

Family MEROPIDAE : Bee-eaters

259 744 Chestnutheaded Bee-eater ചെന്തലയൻ വേലിത്തത്ത.
Merops leschenaulti leschenaulti Vieillot

260 748 Bluetailed Bee-eater വലിയ വേലിത്തത്ത.
Merops philippinus philippinus Linnaeus

261 750 Green Bee-eater നാട്ടുവേലിത്തത്ത
Merops orientalis orientalis Latham

262 753 Bluebearded Bee-eater കാട്ടുവേലിത്തത്ത.
Nyctyornis athertoni athertoni (Jardine & Selby)

Family CORACIIDAE : Rollers

263 756 Indian Roller പനങ്കാക്ക.
Coracias benghalensis indica Linnaeus

264 759 Broadbilled Roller കാട്ടുപനങ്കാക്ക.
Eurystomus orientalis laetior Sharpe

Family UPUPIDAE : Hoopoes

265 765 Hoopoe ഉപ്പൂപ്പൻ.
Upupa epops ceylonensis Reichenbach

Family BUCEROTIDAE : Hornbills

266 767 Common Grey Hornbill നാട്ടുവേഴാമ്പൽ.
Tockus birostris (Scopoli)

267 768 Malabar Grey Hornbill കോഴി വേഴാമ്പൽ.
Tockus griseus griseus (Latham)

268 775 Malabar Pied Hornbill പാണ്ടൻ വേഴാമ്പൽ.
Anthracoceros coronatus coronatus (Boddaert)

269 776 Great Pied Hornbill മലമുഴക്കി.
Buceros bicornis homrai Hodgson

Order PICIFORMES

Family CAPITONIDAE : Barbets

270 781 Western (Large)Green Barbet വലിയ ചെങ്കണ്ണൻ കുട്ടുറുവൻ.
Megalaima zeylanica inornata Walden

271 782 Ceylon Green Barbet സിലോൺ കുട്ടുറുവൻ.
Megalaima zeylanica zeylanica (Gmelin)

272 785 Small Green Barbet ചിന്നക്കുട്ടുറുവൻ.
Megalaima viridis (Boddaert)

273 790 Crimsonthroated Barbet ആൽക്കിളി
Megalaima rubricapilla malabarica (Blyth)

274 792 Crimsonbreasted barbet, Coppersmith ചെമ്പുകൊട്ടി.
Megalaima haemacephala indica (Latham)

Family PICIDAE : Wood peckers

275 796 Wryneck
Jynx torquilla torquilla Linnaeus

276 799 Speckled Piculet മരംകൊത്തിച്ചിന്നൻ.
Picumnus innominatus malayorum Hartert

277 804 Rufous Woodpecker ചെമ്പൻ മരംകൊത്തി.
Micropternus brachyurus jerdonii (Malherbe)

278 808 Little Scalybellied Woodpecker മഞ്ഞക്കാഞ്ചി മരംകൊത്തി.
Picus myrmecophoneus Stresemann

279 816 Small Yellownaped Woodpecker മഞ്ഞപ്പിടലി മരംകൊത്തി.
Picus chlorolophus chlorigaster Jerdon

280 821 Lesser Goldenbacked Woodpecker നാട്ടുമരംകൊത്തി.
Dinopium benghalense tehminae (Whistler & Kinnear)

281 825 Indian Goldenbacked Threetoed Woodpecker ത്രിയംഗുലി മരംകൊത്തി
Dinopium javanense malabaricum Whistler & Kinnear

282 830 Indian Great Black Woodpecker കാക്ക മരംകൊത്തി.
Dryocopus javensis hodgsonii (Jerdon)

283 847 Yellowfronted Pied Woodpecker മറാഠാ മരംകൊത്തി.
Picoides mahrattensis mahrattensis (Latham)

284 853 Pigmy Woodpecker തണ്ടാൻ മരംകൊത്തി
Picoides nanus cinereigula (Malherbe)

285 856 Heartspotted Woodpecker ചിത്രാംഗദൻ മരംകൊത്തി.
Hemicircus canente canente (Lesson)

286 858 Blackbacked Woodpecker പാണ്ടൻ പൊന്നി മരംകൊത്തി.
Chrysocolaptes festivus festivus (Boddaert)

287 862 Larger Goldenbacked Woodpecker വലിയപൊന്നി മരംകൊത്തി.
Chrysocolaptes lucidus chersonesus Kloss

Order PASSERIFORMES

Family PITTIDAE : Pittas

288 867 Indian Pitta കാവി.
Pitta brachyura brachyura (Linnaeus)

Family ALAUDIDAE : Larks

289 874 Bush Lark ചെമ്പൻ പാടി.
Mirafra assamica affinis Blyth

290 878 Ashycrowned Finch-Lark കരിവയറൻ വാനമ്പാടി.
Eremopterix grisea (Scopoli)

291 883 Rufoustailed Finch-Lark ചെമ്പുവാലൻ വാനമ്പാടി.
Ammomanes phoenicurus testaceus Koelz

292	886	Short-Toed Lark കൂട്ടപ്പാടി. *Calandrella cinerea dukhunensis* (Sykes)
293	901	Malabar Crested Lark കൊമ്പൻ വാനമ്പാടി. *Galerida malabarica* (Scopoli)
294	902	Syke's Crested Lark കൊമ്പൻ വാനമ്പാടി. *Galerida deva* (Sykes)
295	908	Eastern Skylark വാനമ്പാടിക്കിളി. *Alauda gulgula australis* Brooks

Family HIRUNDINIDAE : Swallows

296	912	Plain Sand Martin *Riparia paludicola chinensis* (J.E.Gray)
297	913	Crag Martin *Hirundo rupestris* Scopoli
298	914	Dusky Crag Martin തവിടൻ കത്രിക. *Hirundo concolor concolor* Sykes
299	917	Eastern Swallow വയൽക്കോതിക്കത്രിക. *Hirundo rustica gutturalis* Scopoli
300	919	Nilgiri House Swallow കാനക്കത്രിക. *Hirundo tahitica domicola* Jerdon
301	921	Wiretailed Swallow കമ്പിവാലൻ കത്രികക്കിളി. *Hirundo smithii filifera* Stephens
302	922	Indian Cliff Swallow *Hirundo fluvicola* Blyth
303	925 ?	Himalayan Striated Swallow ? *Hirundo daurica nipalensis* Hodgson
304	927	Striated or Redrumped Swallow വരയൻ കത്രിക. *Hirundo daurica erythropygia* Sykes
305	930	House Martin *Delichon urbica urbica* (Linnaeus)

Family LANIIDAE : Shrikes

306	933 ?	Grey Shrike *Lanius excubitor* [*lahtora* (Sykes) ?]
307	940	Baybacked Shrike അസുരക്കിളി. *Lanius vittatus vittatus* Valenciennes
308	947	Rufousbacked Shrike ചാരക്കുട്ടൻ ഷ്രൈക്ക്. *Lanius schach caniceps* Blyth
309	949	Brown Shrike തവിടൻ ഷ്രൈക്ക്. *Lanius cristatus cristatus* Linnaeus

Family ORIOLIDAE : Orioles

310	953	Golden Oriole ഇന്ത്യൻ മഞ്ഞക്കിളി. *Oriolus oriolus kundoo* Sykes
311	954	Blacknaped Oriole ചീന മഞ്ഞക്കിളി. *Oriolus chinensis diffusus* Sharpe

312	958,959	Blackheaded Oriole മഞ്ഞക്കറുപ്പൻ. *Oriolus xanthornus xanthornus* (Linnaeus)
		Family DICRURIDAE : Drongos
313	963	Black Drongo ആനറാഞ്ചി. *Dicrurus adsimilis macrocercus* Vieillot
314	965	Grey or Ashy Drongo കാക്കത്തമ്പുരാൻ. *Dicrurus leucophaeus longicaudatus* Hay
315	967	Whitebellied Drongo കാക്കരാജൻ. *Dicrurus caerulescens caerulescens* (Linnaeus)
316	971	Bronzed Drongo ലളിതക്കാക്ക. *Dicrurus aeneus aeneus* Vieillot
317	973	Haircrested, or Spangled, Drongo കിന്നരിക്കാക്ക. *Dicrurus hottentottus hottentottus* (Linnaeus)
318	977	Greater Racket-tailed Drongo കാടുമുഴക്കി. *Dicrurus paradiseus paradiseus* (Linnaeus)
		Family ARTAMIDAE : Swallow-Shrikes
319	982	Ashy Swallow-Shrike ഇണകാത്തേവൻ. *Artamus fuscus* Vieillot
		Family STURNIDAE : Starlings, Mynas
320	987	Greyheaded Myna ചാരത്തലക്കാളി. *Sturnus malabaricus malabaricus* (Gmelin)
321	988	Blyth's Myna ഗരുഡൻ ചാരക്കിളി. *Sturnus malabaricus blythii* (Jerdon)
322	994	Blackheaded or Brahminy Myna കരിന്തലച്ചിക്കാളി. *Sturnus pagodarum* (Gmelin)
323	996	Rosy Pastor *Sturnus roseus* (Linnaeus)
324	1006	Common Myna നാട്ടുമൈന *Acridotheres tristis tristis* (Linnaeus)
325	1010	Jungle Myna കിന്നരി മൈന *Acridotheres fuscus mahrattensis* (Sykes)
326	1016	Grackle or Hill Myna കാട്ടുമൈന *Gracula religiosa indica* (Cuvier)
		Family CORVIDAE : Crows, Tree Pies
327	1033	Indian Tree Pie ഓലേഞ്ഞാലി. *Dendrocitta vagabunda parvula* Whistler & Kinnear
328	1036	Southern or Whitebellied Tree Pie കാട്ടുഞ്ഞാലി. *Dendrocitta leucogastra* Gould
329	1050	House Crow പേനക്കാക്ക. *Corvus splendens protegatus* Madarasz
330	1057	Jungle Crow ബലിക്കാക്ക. *Corvus macrorhynchos culminatus* Sykes

CAMPEPHAGIDAE : Cuckoo-Shrikes and Minivets

331	1065	Pied Flycatcher-Shrike അസുരപ്പൊട്ടൻ. *Hemipus picatus picatus* (Sykes)
332	1066	Ceylon Pied Flycatcher-Shrike *Hemipus picatus leggei* Whistler
333	1068	Malabar Wood-Shrike അസുരക്കാടൻ. *Tephrodornis virgatus sylvicola* Jerdon
334	1070	Common Wood-Shrike അസുരത്താൻ. *Tephrodornis pondicerianus pondicerianus* (Gmelin)
335	1072	Large Cuckoo-Shrike ചാരപ്പൂണ്ടൻ. *Coracina novaehollandiae macei* (Lesson)
336	1079	Blackheaded Cuckoo-Shrike കരിന്തൊപ്പി. *Coracina melanoptera sykesi* (Strickland)
337	1081	Scarlet Minivet തീക്കുരുവി. *Pericrocotus flammeus flammeus* (Forster)
338	[1089	Rosy Minivet *Pericrocotus roseus roseus* (Vieillot)]
339	1089a	Ashy Minivet *Pericrocotus divaricatus divaricatus* (Raffles)
340	1094	Small Minivet തീച്ചിന്നൻ. *Pericrocotus cinnamomeus malabaricus* (Gmelin)
341	[1096?	Whitebellied Minivet *Pericrocotus erythropygius erythropygius* (Jerdon)]

Family IRENIDAE : Fairy Bluebirds, Ioras and Leaf Birds

342	1101	Common Iora അയോറ. *Aegithina tiphia multicolor* (Gmelin)
343	1104	Goldfronted Chloropsis or Leaf Bird കാട്ടിലക്കിളി. *Chloropsis aurifrons frontalis* (Pelzeln)
344	1105	Goldfronted Chloropsis or Leaf Bird കാട്ടിലക്കിളി. *Chloropsis aurifrons insularis* Whistler & Kinnear
345	1107	Goldmantled, or Jerdon's, Chloropsis or Leaf Bird നാടൻ ഇലക്കിളി. *Chloropsis cochinchinensis jerdoni* (Blyth)
346	1109,1110	Fairy Bluebird ലളിത. *Irena puella puella* (Latham)

Family PYCNONOTIDAE : Bulbuls

347	1114	Greyheaded Bulbul പ്രാക്കുരുവി; ചാരത്തലയൻ ബുൾബുൾ *Pycnonotus priocephalus* (Jerdon)
348	1116	Rubythroated Bulbul മണികണ്ഠൻ. *Pycnonotus melanicterus gularis* (Gould)
349	1120	Redwhiskered Bulbul ഇരട്ടത്തലച്ചി. *Pycnonotus jocosus fuscicaudatus* (Gould)

350	1128	Redvented Bulbul നാട്ടുബുൾബുൾ. *Pycnonotus cafer cafer* (Linnaeus)
351	1135	Yellowthroated Bulbul *Pycnonotus xantholaemus* (Jerdon)
352	1138	Whitebrowed Bulbul തവിടൻ ബുൾബുൾ. *Pycnonotus luteolus luteolus* (Lesson)
353	1144	Yellowbrowed Bulbul മഞ്ഞച്ചിന്നൻ. *Hypsipetes indicus indicus* (Jerdon)
354	1149	Black Bulbul കരിമ്പൻ കാട്ടുബുൾബുൾ. *Hypsipetes madagascariensis ganeesa* Sykes

Family MUSCICAPIDAE: Babblers, Flycatchers, Warblers, Thrushes

Subfamily TIMALIINAE : Babblers

355	1154	Spotted Babbler പുള്ളിച്ചിലപ്പൻ. *Pellorneum ruficeps ruficeps* Swainson
356	1155	Spotted Babbler പുള്ളിച്ചിലപ്പൻ. *Pellorneum ruficeps olivaceum* Jerdon
357	1174	Slatyheaded Scimitar Babbler ചോലക്കുടുവൻ. *Pomatorhinus horsfieldii travancoreensis* Harington
358	1221	Whitethroated Babbler ചിന്നച്ചിലപ്പൻ. *Dumetia hyperythra albogularis* (Blyth)
359	1225	Blackheaded Babbler പൊടിച്ചിലപ്പൻ. *Rhopocichla atriceps bourdilloni* (Hume)
360	1231	Yelloweyed Babbler മഞ്ഞക്കണ്ണി ചിലപ്പൻ. *Chrysomma sinense sinense* (Gmelin)
361	1254	Common Babbler *Turdoides caudatus cautdatus* (Dumont)
362	[1258 ?	Large Grey Babbler *Turdoides malcolmi* (Sykes) ?]
363	1259	Rufous Babbler ചെഞ്ചിലപ്പൻ. *Turdoides subrufus subrufus* (Jerdon)
364	1260	Rufous Babbler ചെഞ്ചിലപ്പൻ. *Turdoides subrufus hyperythrus* (Sharpe)
365	1264	Jungle Babbler കരിയിലക്കിളി. *Turdoides striatus malabaricus* (Jerdon)
366	1267	Whiteheaded Babbler പൂത്താങ്കീരി. *Turdoides affinis affinis* (Jerdon)
367	1287	Wynad Laughing Thrush പതുങ്ങൻ ചിലപ്പൻ. *Garrulax delesserti delesserti* (Jerdon)
368	1307,1308	Nilgiri Laughing Thrush നീലഗിരി ചിലപ്പൻ. *Garrulax cachinnans* (Jerdon)
369	1310	Whitebreasted Laughing Thrush വടക്കൻ ചിലുചിലപ്പൻ. *Garrulax jerdoni fairbanki* (Blanford)

370	1311	Travancore Whitebreasted Laughing Thrush തെക്കൻ ചിലുചിലപ്പൻ. *Garrulax jerdoni meridionale* (Blanford)
371	1390	Quaker Babbler കാനാച്ചിലപ്പൻ. *Alcippe poioicephala poioicephala* (Jerdon)
		Subfamily MUSCICAPINAE : Flycatchers
372	1407	Brown Flycatcher തവിട്ടുപാറ്റ പിടിയൻ. *Muscicapa latirostris* Raffles
373	1408	Brownbreasted Flycatcher മുത്തുപ്പിള്ള. *Muscicapa muttui muttui* (Layard)
374	1409	Rufoustailed Flycatcher ചെമ്പുവാലൻ പാറ്റപിടിയൻ. *Muscicapa ruficauda* Swainson
375	1412	Redbreasted Flycatcher *Muscicapa parva albicilla* Pallas
376	1427	Black-and-Orange Flycatcher കരിഞ്ചെമ്പൻ പാറ്റപിടിയൻ. *Muscicapa nigrorufa* (Jerdon)
377	1435	Whitebellied Blue Flycatcher കാട്ടുനീലി. *Muscicapa pallipes* Jerdon
378	1440	Bluethroated Flycatcher നീലച്ചെമ്പൻ. *Muscicapa rubeculoides rubeculoides* (Vigors)
379	1442	Tickell's Blue Flycatcher നീലക്കുരുവി. *Muscicapa tickelliae tickelliae* (Blyth)
380	1445	Verditer Flycatcher നീലമേനി പാറ്റപിടിയൻ. *Muscicapa thalassina thalassina* Swainson
381	1446	Nilgiri Flycatcher നീലക്കിളി പാറ്റപിടിയൻ. *Muscicapa albicaudata* Jerdon
382	1449	Greyheaded Flycatcher നരയൻ പാറ്റപിടിയൻ. *Culicicapa ceylonensis ceylonensis* (Swainson)
		Subfamily RHIPIDURINAE : Fantail Flycatchers
383	1452	Whitebrowed Fantail Flycatcher ആട്ടക്കാരൻ പാറ്റപിടിയൻ. *Rhipidura aureola compressirostris* (Blyth)
384	[1458	Whitethroated Fantail Flycatcher *Rhipidura albicollis albogularis* (Lesson)]
		Subfamily MONARCHINAE : Monarch Flycatchers
385	1460	Paradise Flycatcher നാകമോഹൻ. *Terpsiphone paradisi leucogaster* (Swainson)
386	1461	Paradise Flycatcher നാകമോഹൻ. *Terpsiphone paradisi paradisi* (Linnaeus)
387	1465	Blacknaped Flycatcher വെൺനീലി. *Hypothymis azurea styani* (Hartlaub)

Subfamily SYLVIINAE : Warblers

388 1496 Redheaded Fantail Warbler നെൽപ്പൊട്ടൻ.
Cisticola exilis erythrocephala Blyth

389 1499 Streaked Fantail Warbler പോതപ്പൊട്ടൻ.
Cisticola juncidis salimalii Whistler

390 1504 Franklin's Wren-Warbler താലിക്കുരുവി.
Prinia hodgsoni albogularis Walden

391 1513 Plain Wren-Warbler വയൽക്കുരുവി.
Prinia subflava franklinii Blyth

392 1517 Ashy Wren-Warbler കതിർവാലൻ കുരുവി.
Prinia socialis socialis Sykes

393 1521 Jungle Wren-Warbler ചെട്ടിക്കുരുവി.
Prinia sylvatica sylvatica Jerdon

394 1535 Tailor Bird തുന്നാരൻ.
Orthotomus sutorius guzuratus (Latham)

395 1543 Pallas's Grasshopper Warbler
Locustella certhiola rubescens Blyth

396 1545 Grassopper Warbler പുൽക്കുരുവി.
Locustella naevia straminea Seebohm

397 1546 Broadtailed Grass Warbler പോതക്കിളി.
Schoenicola platyura (Jerdon)

398 1549 Thickbilled Warbler
Acrocephalus aedon aedon (Pallas)

399 1550 Indian Great Reed Warbler കൈതക്കള്ളൻ.
Acrocephalus stentoreus brunnescens (Jerdon)

400 1556 Blyth's Reed Warbler ഈറ്റ പൊളിപ്പൻ.
Acrocephalus dumetorum Blyth

401 1557 Paddyfield Warbler പാടക്കുരുവി.
Acrocephalus agricola agricola (Jerdon)

402 1563 Booted warbler
Hippolais caligata rama (Sykes)

403 1565 Orphean Warbler
Sylvia hortensis jerdoni (Blyth)

404 1567,1570 Lesser Whitethroat
Sylvia curruca (subspecies ?) (Linnaeus)

405 1578 Tytler's Leaf Warbler
Phylloscopus tytleri Brooks

406 1579 Tickell's Leaf Wrbler
Phylloscopus affinis affinis (Tickell)

407 1601 Largebilled Leaf Warbler
Phylloscopus magnirostris Blyth

408 1602 Greenish Leaf Warbler
Phylloscopus trochiloides viridanus Blyth

409 1605 Greenish Leaf Warbler
Phylloscopus trochiloides nitidus Blyth

410 1606 Large Crowned Leaf Warbler
Phylloscopus occipitalis occipitalis (Blyth)

Subfamily TURDINAE : Thrushes and Chats

411 [1637 Rufousbellied Shrowing
Brachypteryx major major (Jerdon)]

412 1638 Whitebellied Shortwing സന്ധ്യക്കിളി.
Brachypteryx major albiventris (Blanford)

413 1644 Bluethroat നീലകണ്ഠപ്പക്ഷി.
Erithacus svecicus svecicus (Linnaeus)

414 1650,1651 Blue Chat നീലത്തൻ.
Erithacus brunneus brunneus (Hodgson)

415 [1660? Rufousbellied Bush Robin ?
Erithacus hyperythrus (Blyth)]

416 1662 Magpie-Robin മണ്ണാത്തിപ്പുള്ള്.
Copsychus saularis ceylonensis Sclater

417 1665 Shama ഷാമക്കിളി.
Copsychus malabaricus malabaricus (Scopoli)

418 1672 Eastern Black Redstart വിറവാലൻ കുരുവി.
Phoenicurus ochruros rufiventris (Vieillot)

419 1702 Pied Bush Cat ചുറ്റീന്തൽക്കിളി.
Saxicola caprata nilgiriensis Whistler

420 1710 Desert Wheatear
Oenanthe deserti deserti (Temminck)

421 1720 Indian Robin കൽമണ്ണാത്തി.
Saxicoloides fulicata fulicata (Linnaeus)

422 1723 Blueheaded Rock Thrush മേനിപ്പാറക്കിളി.
Monticola cinclorhynchus (Vigors)

423 1726 Blue Rock Thrush നീലപ്പാറക്കിളി.
Monticola solitarius pandoo (Sykes)

424 1728 Malabar Whistling Thrush ചൂളക്കാക്ക.
Myiophonus horsfieldii horsfieldii (Vigors)

425 1731 Pied Ground Thrush കോഴിക്കിളി
Zoothera wardii (Blyth)

426 1733 Orangeheaded Ground Thrush
Zoothera citrina citrina (Latham)

427 1734 Whitethroated Grond Thrush കുറിക്കണ്ണൻ കാട്ടുപുള്ള്.
Zoothera citrina cyanotus (Jardine & Selby)

428 1742 Nilgiri Thrush കോഴിക്കിളിപ്പൊന്നൻ.
Zoothera dauma neilgherriensis (Blyth)

429 1753 Blackcapped Blackbird കരിങ്കിളി.
Turdus merula nigropileus (Lafresnaye)

430 1756 Bourdillon's Blackbird കരിങ്കിളി.
Turdus merula bourdilloni (Seebom)

Family PARIDAE

Subfamily PARINAE : Tits, Titmice

431 1795 Grey Tit ചാര മരപ്പൊട്ടൻ.
Parus major mahrattarum Hartert

432 1811 Yellowcheeked Tit പച്ചമരപ്പൊട്ടൻ.
Parus xanthogenys travancoreensis (Whistler & Kinnear)

Family SITTIDAE

Subfamily SITTINAE : Nuthatches

433 1830 Peninsular Chestnutbellied Nuthatch താമ്രഉദരൻ ഗൗളിക്കിളി; മരം നിരങ്ങി.
Sitta castanea Lesson

434 1838 Velvetfronted Nuthatch ഗൗളിക്കിളി.
Sitta frontalis frontalis Swainson

Family MOTACILLIDAE : Pipits and Wagtails

435 1853 Indian Tree Pipit
Anthus hodgsoni yunnanensis Uchida & Kuroda

436 1857 Richard's Pipit
Anthus novaeseelandiae richardi Vieillot

437 1860 Paddy field Pipit വയൽ വരമ്പൻ.
Anthus novaeseelandiae malayensis Eyton

438 [1863 Blyth's Pipit
Anthus godlewskii (Taczanowski)]

439 1869 Kerala Rock Pipit പാറനിരങ്ങൻ
Anthus similis travancoriensis Ripley

440 1870 Nilgiri Pipit മലവരമ്പൻ.
Anthus nilghiriensis Sharpe

441 1874 Forest Wagtail കാട്ടുവാലുകുലുക്കി.
Motacilla indica Gmelin

442 1875 Greyheaded Yellow Wagtail മഞ്ഞ വാലുകുലുക്കി.
Motacilla flava thunbergi Billberg

443 1875a Short-tailed Greyheaded Yellow wagtail
Motacilla flava simillima Hartert

444 1876 Blueheaded Yellow Wagtail
Motacilla flava beema (Sykes)

445 1877 Yellowbacked Wagtail
Motacilla flava lutea (Gmelin)

446 1878 Turkestan Blackheaded Wagtail
Motacilla flava melanogrisea (Homeyer)

447 1882 Western Yellowheaded Wagtail
Motacilla citreola werae (Buturlin)

448 1884 Grey Wagtail വഴികുലുക്കി.
Motacilla cinerea cinerea (Tunstall)

449 1885 White Wagtail വെള്ള വാലുകുലുക്കി.
Motacilla alba dukhunensis Sykes

450	1886	Masked Wagtail *Motacilla alba personata* Gould
451	1891	Large Pied Wagtail വലിയ വാലുകുലുക്കി. *Motacilla maderaspatensis* Gmelin
		Family DICAEIDAE : Flowerpeckers
452	1892,1894	Thickbilled Flowerpecker നീലച്ചുണ്ടൻ ഇത്തിക്കണ്ണിക്കുരുവി. *Dicaeum agile agile* (Tickell)
453	1899	Tickell's Flowerpecker ചെങ്കൊക്കൻ ഇത്തിക്കണ്ണിക്കുരുവി. *Dicaeum erythrorhynchos erythrorhynchos* (Latham)
454	1902	Nilgiri Flowerpecker കരിഞ്ചുണ്ടൻ ഇത്തിക്കണ്ണിക്കുരുവി. *Dicaeum concolor concolor* Jerdon
		Family NECTARINIIDAE : Sunbirds
455	1907	Purplerumped Sunbird മഞ്ഞത്തേൻകിളി. *Nectarinia zeylonica flaviventris* (Hermann)
456	1909	Small Sunbird ചെറുതേൻകിളി. *Nectarinia minima* (Sykes)
457	1911	Loten's Sunbird വലിയ തേൻകിളി. (കൊക്കൻ തേൻകിളി) *Nectarinia lotenia hindustanica* (Whistler)
458	1917	Purple Sunbird കറുപ്പൻ തേൻകിളി. *Nectarinia asiatica asiatica* (Latham)
459	1929	Yellowbacked Sunbird *Aethopyga siparaja vigorsii* (Sykes)
460	1931	Little Spiderhunter തേൻകിളി മാടൻ. *Arachnothera longirostris longirostris* (Latham)
		Family ZOSTEROPIDAE : White-eyes
461	1935	Nilgiri White-eye വെള്ളക്കണ്ണിക്കുരുവി. *Zosterops palpebrosa nilgiriensis* Ticehurst
		Family PLOCEIDAE Subfamily PASSERINAE : House and Rock Sparrows
462	1938	House Sparrow അങ്ങാടിക്കുരുവി. *Passer domesticus indicus* Jardine & Selby
463	1949	Yellowthroated Sparrow മഞ്ഞത്താലി. *Petronia xanthocollis xanthocollis* (Burton)
		Subfamily PLOCEINAE : Weaver Birds, Bayas
464	1958	Travancore Baya ആറ്റക്കുരുവി. *Ploceus philippinus travancoreensis* Whistler

465	1962	Streaked Weaver Bird കായലാറ്റ. *Ploceus manyar flaviceps* Lesson

Subfamily ESTRILDINAE : Munias, Avadavats

466	1964	Red Munia or Avadavat ചുവന്ന മൂനിയ. *Estrilda amandava amandava* (Linnaeus)
467	1965	Green Munia പച്ചമൂനിയ. *Estrilda formosa* (Latham)
468	1966	Whitethroated Munia വയലാറ്റ. *Lonchura malabarica malabarica* (Linnaeus)
469	1968	Whitebacked Munia ആറ്റക്കറുപ്പൻ. *Lonchura striata striata* (Linnaeus)
470	1971,1972	Rufousbellied Munia തോട്ടക്കാരൻ. *Lonchura kelaarti jerdoni* (Hume)
471	1974	Spotted Munia ചുട്ടിയാറ്റ. *Lonchura punctulata punctulata* (Linnaeus)
472	1978	Blackheaded Munia ആറ്റചെമ്പൻ. *Lonchura malacca malacca* (Linnaeus)

Family FRINGILLIDAE

Subfamily CARDUELINAE : Goldfinches and allies

473	2011	Common Rosefinch റോസക്കുരുവി. *Carpodacus erythrinus roseatus* (Blyth)

ADDITIONAL SPECIES

474	468?	Blacknaped Tern *Sterna sumatrana* Raffles
475	997?	Starling *Sturnus vulgaris* Linnaeus.

APPENDIX - II

1. LIST OF PERSONS WHO PROVIDED INFORMATION IN RESPONSE TO 'THANAL'S APPEAL.

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3. PERSONS NOT IN EITHER OF THE ABOVE LISTS, FROM WHOM INFORMATION WAS OBTAINED BY PERSONAL COMMUNICATION OR THROUGH THEIR PUBLISHED PAPERS OR ARTICLES.

Abdulali. Humayun,
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Davison, William.
Faizi.S.
Gaston.A.J.
George.N.J.
George.P.V.
Grimwood.I.R.
Harrap.S.C.
Hoffman.T.W.
Jamal.K.K.
Jayakumar.C.
Jayson.E.A.
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Kannan.R.
Khan.M.A.Reza,
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Manoj.V.Nair
Mundkur, Taej
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Neelakantan.K.K.
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Rajeevan.S.
Rasheed Mudappallur.
Raveendran.P.K.
Redman.N.J.
Ripley. Dr.S.Dillon,
Samy.P.L.
Santharam.V.
Satheesan. Dr.S.M.
Serrao.J.S.
Shukkur.E.A.A.
Sivaprasad.P.S.
Sethumadhavan.C.P.
Sreenivasan.Dr.K.V.
Sujithkumar.C.K.
Suresh Elamon.
Shymaprasad Anand.
Tahir. Siraj.A.,
Unnikrishnan.P.N.
Uthaman.P.K.
Venugopalan. R.
Vijayan.Dr.V.S.
Zacharia. Anil,
Zacharia. Dr.V.J.

4. ABBREVIATIONS OF THE NAMES OF PERSONS FREQUENTLY REFERRED TO IN THE TEXT (Both Part I & II.)

AR	-	Andrew Robertson
CAAB	-	C.A.Abdul Basheer.
CJ	-	C.Jayakumar
CSK	-	C.Sashikumar
D.N.Kurup	-	Deepakumar N.Kurup.
JP	-	Jafer Palot.
KKN	-	K.K.Neelakantan.
KVS	-	K.V.Srinivasan
LN	-	L.Namasivayan.
MCAJ	-	M.C.A.Jackson.
PKU	-	P.K.Uthaman.
PON	-	P.O.Nameer.
RV	-	R.Venugopalan.
SA	-	Salim Ali.
SE	-	Suresh Elamon.

5. MISCELLANEOUS ABBREVIATIONS.

ICBP	-	International Council for Bird Preservation.
IWRB	-	International Waterfowl and Wetlands Research Bureau.
SF	-	Stray Feathers (a journal edited by A.O.Hume, 11 Vols.).
SVNP	-	Silent Valley National Park (Palghat Dt.).
VSR or VS Report	-	Report of the Vernay Scientific Survey of the Eastern Ghats, Ornithological Section (*JBNHS* 34:386 to 39:463) Ed. Hugh Whistler & N.B.Kinnear.
WL Sanctuary	-	Wildlife Sanctuary (&/or National Park.).

6. LIST OF PERSONS FROM WHOSE PUBLISHED PAPERS OR ARTICLES INFORMATION WAS OBTAINED.

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Ali, Salim. *JBNHS* 60:412; 37:815 to 39:593. *NLB* Sept. 1961;
Ambedkar, V.C.*JBNHS* 82:410.
Brocklehurst, M.J.C. See Grimwood, I.R.
Editors of JBNHS. *JBNHS* 76:366.

Faizi,S. *JBNHS* 82:191.
Fleming,R.L. Sr. *NLB* July 1966:9.
Gaston,A.J. *JKNHS* 2:28.
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Grimwood, I.R. and M.J.C.Brocklehurst *JBNHS* 81:697.
Harrap, S.C. and N.J.Redman. *JBNHS* 86:460.
Hoffman, T.W. *JBNHS* 84-440.
Hussain, S.A. and M.A.Reza Khan. *JBNHS* 74:334.
Jackson, M.C.A. *JBNHS* 64:367.
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Khan, M.A.R. See Hussain.S.A.
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Krishnan, O.G. *JBNHS* 87:449.
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" and E.A.A.Shukkur. *JBNHS* 71:144.
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" and V.K.Sureshkumar. *JBNHS* 77:510.
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ABBREVIATIONS USED IN THE TEXT FOR SOME OF THE ABOVE BOOKS.

BIB - *The Book of Indian Birds.* Salim Ali.

BOK - *Birds of Kerala.* Salim Ali.

Bs. of C. - *A Guide to the Birds of Ceylon.* G.M.Henry.

Bs.Sn. Ind. or Bs. of Sn.In. - *The Birds of Southern India.* Baker & Inglis.

FBI - *Fauna of British India.*

FBI (1895) - Vol.III of FBI, Birds, Ed. Blanford, W.T.

FBI II - FBI Birds 2nd Edition, 8 Volumes. Ed.Baker, E.C.S.(1922-1930).

FG BBE - *A Field Guide to the Birds of Britain & Europe.* R.T.Peterson et al.

FG BJ - *A Field Guide to the Birds of Japan.* Sonobe, K. et al.

FG B SEA - *A Field Guide to the Birds of South-East Asia.* King,B et al.

FG B USSR - *A Field Guide to the Birds of USSR.* Flint, V.E. et al.

Hbk or HANDBOOK - *Handbook of the Birds of India & Pakistan.* Salim Ali & S.D.Ripley.

PHIB - *Popular Handbook of Indian Birds*. Hugh Whistler.

Ric.G. - *Pictorial Guide to the Birds of the Indian Sub-continent*. Salim Ali & S.D.Ripley.

Sh.Bs. or SHOREBIRDS. *SHOREBIRDS*. J.Marchant et al.

SYN 2 or SYNOPSIS 2 - *A Synopsis of the Birds of India & Pakistan*. 2nd edition. Ripley, S.Dillon.

MAJOR PAPERS PUBLISHED IN JOURNALS REFERRED TO IN THIS BOOK.**

1. The Vernay Scientific Survey of the Eastern Ghats. Ornithological Section. N.B.Kinnear & Hugh Whistler. In 16 Parts. *Journal of the Bombay Nat. Hist. Society*, Vols.34 to 39 (July 1930 to September 1937). Often referred to as VS Report.
2. The Ornithology of Travancore and Cochin. Salim Ali. In 8 parts. *JBNHS* Vols. 37 to 39 (April 1935 to September 1937).
3. Random Notes on Birds of Kerala. M.C.A.Jackson. *JBNHS* 68(1) September 1971.
4. Birds observed at Cheruthuruthy. A.J. Gaston. *J. Kerala Nat. Hist. Society*, Vol 2 (October 1979).

ABBREVIATIONS USED IN REFERRING TO PERIODICALS.

JBNHS - Journal of the Bombay Natural History Society, Bombay.

JKNHS - Journal of the Kerala Natural History Society, Trivandrum and Calicut.

NLB or *NEWSLETTER* - Newsletter for Birdwatchers. Z.Futehally(Ed.) Bombay & Bangalore.

BLACKBUCK - The quarterly journal of the Madras Naturalists' Society. Madras.

** Reference to short notes published in periodicals are given in the text itself. See also the list of persons from whose published papers or articles information was derived, p.p. 135, 136.

INDEX OF ENGLISH NAMES

Avadavat or Red Munia, 97
Avocet, 46
Babbler, Yellow-eyed, 81
Barbet, Western Green, 70
Bittern, Little, 8,101
Booby, Brown, 3
" , Masked, 1
Bustard, Houbara, 31
Bustard-Quail, Little, 29
Coot, 29
Cormorant, Large, 4,101
Cuckoo, Small, 61
Dove, Western Turtle, 59
Duck, Brahminy (Ruddy Shelduck), 19
" , Comb (Nakta), 22
" , Pintail, 20,101
" , Spotbill, 21
Dunlin, 42
Eagle, Whitetailed, 23
Falcon, Laggar, 25
Finch-Lark, Rufous-tailed, 72
Flamingo, The (Greater), 16
Frigate Bird, Least, 7
Gadwall, 22
Godwit, Bartailed, 37
" , Blacktailed, 36
Goose, Barheaded, 17
Grebe, Great Crested, 99
Gull, Pinklegged Herring, 50
" , Yellowlegged Herring, 50
Hornbill, Common Grey, 67
Houbara, 31
Ibis, Black, 12
" , Glossy, 13
Knot, Eastern, 39
Lark, Rufous-tailed Finch-, 72
Martin, Crag, 74
" , European House, 78,103
" , Plain Sand, 73
Minivet, Ashy, 80
Munia, Green, 98
" , Red or Avadavat, 97,104
Nuthatch, Chestnut bellied, 92
Owl, Longeared, 65
" , Peninsular Bay, 62
" , Peninsular Scops, 64,103
Parakeet, Large Ceylonese or
" Alexandrine, 60
Pintail, 20,101
Plover, Crab, 47,102
" , Grey, 31
" , Great Stone, 48
" , Little Ringed, 33,101
Pratincole, Large Indian, 49,102
Quail Grey, 26
" , Little Bustard, 29
Redstart, Black, 88
Robin, Rufousbellied Bush, 87
Ruff, 44
Sanderling, 40
Sand Martin, Plain, 73
Sandpiper, Spoonbilled, 43
" , Terek, 38
Shag, 6
Shelduck, Ruddy or Brahminy Duck, 19
Shortwing, Rufousbellied, 86
Shrike, Grey, 79
Snipe, Swinhoe's, 39

Spoonbill (Stork), 14
Spurfowl, Painted, 28
" , Red 27
Starling, 103
Stilt, Blackwinged, 45
Stint, Temminck's, 41,102
Stork, Black, 11
" , Painted 9
" , White 10
Swallow, Cliff, 76,103
" , Himalayan Striated,
" , (Redrumped), 77
" , Wiretailed, 75
Swallow-Plover, Large Indian, 49
Swift, Large Whiterumped, 66
Teal, Large Whistling, 18
Tern, Blackbellied, 54
" , Blacknaped, 100
" , Brownwinged, 55
" , River, 51,102
" , Sandwich, 57
" , Saunders's, Little, 57
" , Sooty, 56
" , Whitecheeked, 53
Ternlet, Blackshafted, 57
Thrush, Nilgiri Laughing, 82
" , Orangeheaded Ground, 91
Tropic Bird, Redbilled or Short-tailed, 1
Vulture, Cinereous, 24
Wagtail, Masked, 96
" , Turkestan Blackheaded, 95
" , Western Yellowheaded, 95
" , Yellowbacked, 95
Warbler, Orphean, 83
" , Pallas's Grassshopper, 83
" , Tytler's Leaf, 85
Wheatear, Desert, 89
Whitethroat, Lesser, 84
Wryneck, 71

INDEX : SCIENTIFIC NAMES

acuta (Anas), 20,101
acuticauda (Sterna), 54
Aegypius, 24
aethereus (Phaethon), 1
alba (Motacilla), 96
alba (Calidris), 40
albicilla (Haliaeetus), 23
alpina (Calidris), 42
amandava (Estrilda), 97,104
Ammomanes, 72
anaethetus (Sterna), 55
Anas, 20 - 22,101
Anser, 17
Apus, 66
ardeola (Dromas), 47,102
argentatus (Larus), 50
ariel (Fregata), 7
Asio, 65
atra (Fulica), 29
aurantia (Sterna), 51,102
avosetta (Recurvirostra), 46
badius (Phodilus), 62
biarmicus (Falco), 25
bicolor (Dendrocygna), 18
birostris (Tockus), 67
Brachypteryx, 86
cachinnans (Garrulax), 82
Calidris, 39 - 42,102
carbo (Phalacrocorax), 4,101
castanea (Sitta), 92
certhiola (Locustella), 83
Charadrius, 33,101
Chlamydotis, 31
Chrysomma, 81
Ciconia, 10,11
ciconia (Ciconia), 10
citreola (Motacilla), 95,104
citrina (Zoothera), 91
Coturnix, 26
coturnix (Coturnix), 26
cristatus (Podiceps), 99
Cuculus, 61
curruca (Sylvia), 84
dactylatra (Sula), 1
daurica (Hirundo), 77
Delichon, 78,103
Dendrocygna, 18
deserti(Oenanthe), 89
divaricatus (Pericrocotus), 80
Dromas, 47,102
dubius (Charadrius), 33,101
Erithacus, 87
Esacus, 48
Estrilda, 97,98
eupatria (Psittaula), 60
Eurynorhynchus, 43
excubitor (Lanius), 79
falcinellus (Plegadis), 13
Falco, 25
ferruginea (Tadorna), 19
flava (Motacilla), 95
fluvicola (Hirundo), 76,103
formosa (Estrilda), 98
Fregata, 7
Fulica, 29
fuscata (Sterna), 56
fuscicollis (Phalacrocorax), 6
Gallinago, 39
Galloperdix, 27,28
Garrulax, 82
Glareola, 49,102
Haliaeetus, 23
Himantopus, 45
himantopus (Himantopus), 45
Hirundo, 74-77,103
hortensis (Sylvia), 83
hyperythrus (Erithacus), 87
indicus (Anser), 17
Ixobrychus, 8, 101
Jynx, 71

Lanius, 79
lapponica (Limosa), 37
Larus, 50
leucocephala (Mycteria), 9
leucogaster (Sula), 3
leucorodia (Platalea), 14
Limosa, 36, 37
limosa (Limosa), 36
Locustella, 83
lunulata (Galloperdix), 28
magnirostris (Esacus), 48
major (Brachypteryx), 86
megala (Gallinago), 39
Megalaima, 70
melanotus (Sarkidiornis), 22
minutus (Ixobrychus), 8,101
monachus (Aegypius), 24
Motacilla, 93-96,104
Mycteria, 9
nigra (Ciconia), 11
ochruros (Phoenicurus), 88
Oenanthe, 89
orientalis (Sreptopelia), 59
Otus 64,103
otus (Asio), 65
pacificus (Apus), 66
paludicola (Riparia), 73
papillosa (Pseudibis), 12
Pericrocotus, 80
Phaethon, 1
Phalacrocorax, 4-6,101
Philomachus, 44
Phodilus, 62
Phoenicopterus, 16
Phoenicurus 88
phoenicurus (Ammomanes), 72
Phylloscopus, 85
Platalea, 14
Plegadis, 13
Pluvialis, 31
Podiceps, 99
poecilorhyncha (Anas), 21
poliocephalus (Cuculus), 61
pratincola (Glareola), 49,102
Pseudibis, 12
Psittacula, 60
pugnax (Philomachus), 44
pygmaeus (Eurynorhynchus), 43
Recurvirostra, 46
repressa (Sterna), 53
Riparia, 73
roseus (Phoenicopterus), 16
rupestris (Hirundo), 74
Sarkidiornis, 22
sandvicensis (Sterna), 57
saundersi (Sterna), 57
scops (Otus), 64,103
sinense (Chrysomma), 81
Sitta, 92
smithii (Hirundo), 75
spadicea (Galloperdix), 27
squatarola (Pluvialis), 31
Sterna, 51 - 57,102
strepera (Anas), 22
Streptopelia, 59
Sturnus, 103
Sula, 1 - 3
sumatrana (Sterna), 100
sylvatica (Turnix), 29
Sylvia, 83, 84
Tadorna, 19
temminckii (Calidris), 41,102
tenuirostris (Calidris), 39
terek (Tringa), 38
Tockus, 67
torquilla (Jynx), 71
Tringa, 38
Turnix, 29
tytleri (Phylloscopus), 85
undulata (Chlamydotis), 31
urbica (Delichon), 78
vulgaris (Sturnus), 103
zeylanica (Megalaima), 70
Zoothera, 91

THE BIRDS OF KERALA
AN APPEAL FOR INFORMATION

The trend in recent years shows that more people, especially youngsters, are being attracted to the field of birdwatching in Kerala. Consequently, a lot of new information on our avifauna is expected to accumulate in the years to come. Compiling all the data after a period of time, say 10 years, would not be easy as our experience with the present work shows. So, THANAL has decided to establish a data base to collect all such new information.

Kindly provide data regarding the 'new' bird(s) you have seen in Kerala and/or the new breeding records. If you have observed a bird breeding outside the period given as the breeding season in Dr.Salim Ali's Birds of Kerala or the present work, please give details of such information also. In order to make it easier to co-ordinate the data, kindly prepare tabulated statements on the models we have provided and send it to the address given below.

We assure that if used for any publication, *all new information will be credited to the person who provided it.*

C.SASHIKUMAR,
THANAL Conservation,
Action & Information Network
9, Subhash Nagar, Kannur 670 002.
Kerala.

The entries should be arranged HORIZONTALLY on sheets of paper 42x30cm approximately

I DETAILS RELATING TO BIRDS SEEN BY..... (Name & address) .....in Kerala BUT NOT INCLUDED IN "BIRDS OF KERALA" or "A BOOK OF KERALA BIRDS"

1. Serial Number. :
2. Species with scientific name :
3. Place at which the bird was seen with District & distance from nearest town :
4. Number of individuals seen :
5. Date (s) on which seen :

6. Name (s) of other birdwatchers if any who were with you & supported your identification

7. Have you reported this to the Bombay Natural History Society or any other institution? If so, please give details :

8. Remarks including as detailed a description as possible of the bird, its habits and habitat in which the bird was seen. (If you have a photograph of the bird seen by you, please enclose a copy with details written on the back) :

II DETAILS RELATING TO BREEDING (Not recorded in BIRDS OF KERALA and A BOOK OF KERALA BIRDS or found nesting outside the season given in these books)

1. Serial Number :

2. Species with scientific name :

3. Place at which seen with brief note on habitat (eg. sea coast, hill, forest, village compound, reedbed, paddy fields etc.) :

5. Condition of the nest (Newly built, with eggs, with nestling etc.) :

6. Whether reported in any scientific publication; if so, details :

7. Remarks. If the nest & nesting bird were seen by other birdwatchers, please give their names and address. If you have photographed the bird / nest please include prints. :

8. Date (s) on which seen. :

LIST OF SOME PLACES WHOSE NAMES HAVE BEEN RECENTLY CHANGED.

Old	New
Alleppey	Alappuzha
Alwaye	Aluva
Calicut	Kozhikode
Cannanore	Kannur
Cochin	Kochi
Crangannore	Kodungallur
Mananthody	Mananthavady
Mannarghat	Mannarkkad
Palghat	Palakkad
Parur	Paravur
Quilon	Kollam
Shertalli	Cherthala
Tellicherry	Thalassery
Trichur	Thrissur
Trivandrum	Thiruvananthapuram

CORRIGENDA

Page

xxx line 6 for 'Nigh' read 'Night' and for 'Little egret' read 'Little Egret'

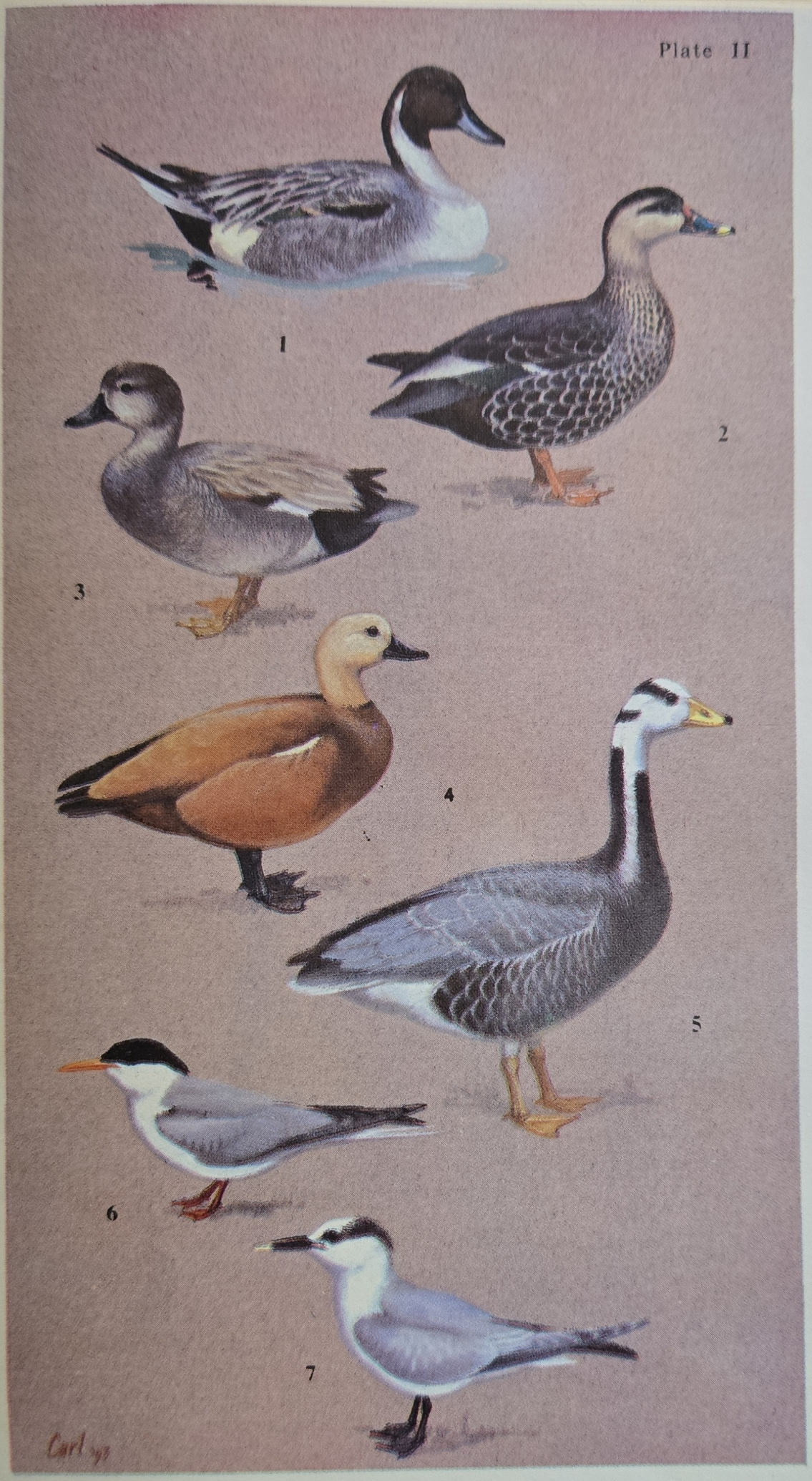
64 line 4 for 'square, brackets' read 'square brackets'

70 line 2 for *Magalaima* read *Megalaima*

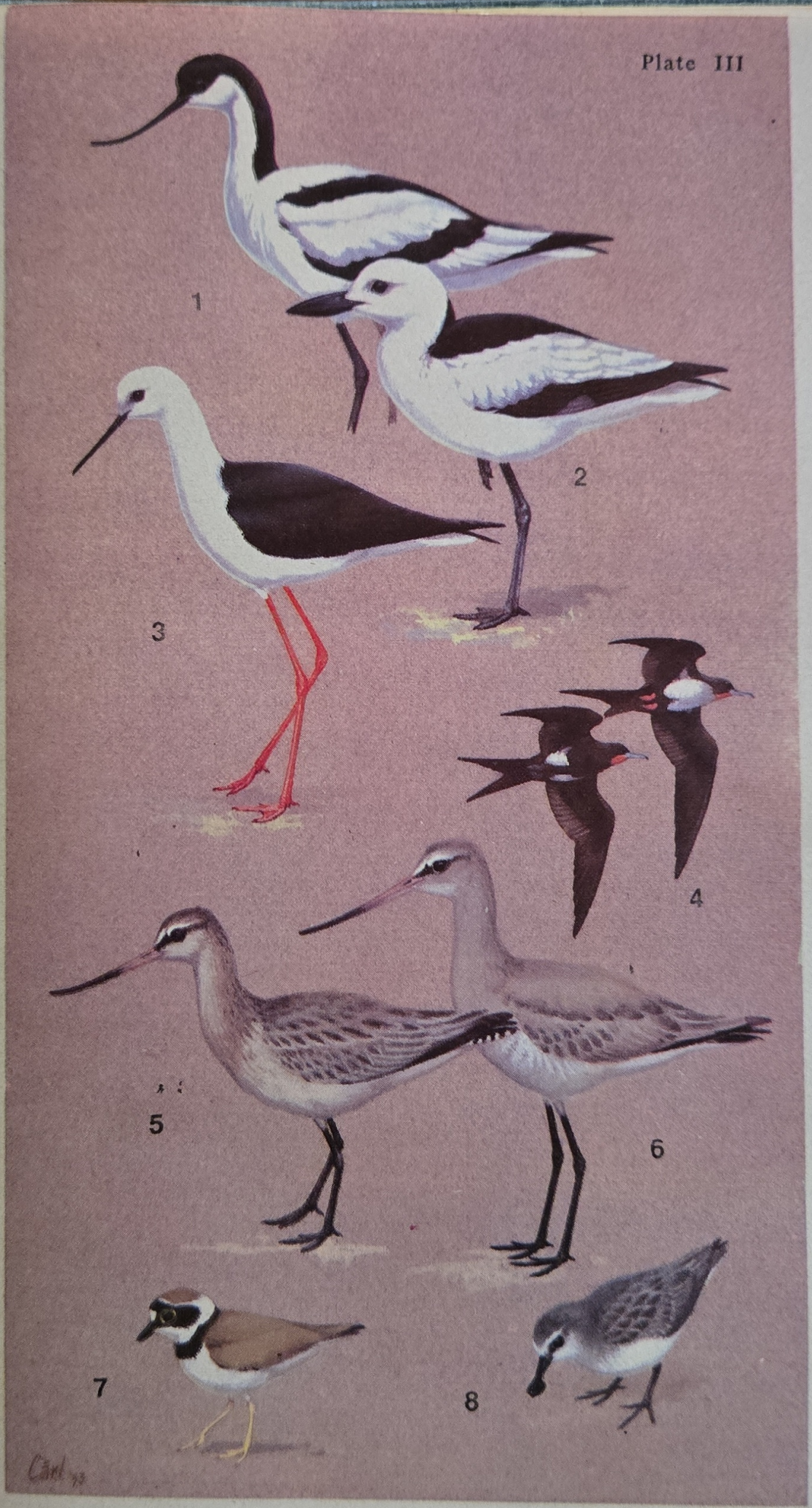
78 line 3 for 'European House Martin and Crag Martin' read 'European House Martin (below) and Crag Martin (Above)'

79 line 5 from foot for 'Parambikulam W•S Sanctuary' read 'Parambikulam W L Sanctuary'

MAP OF
KERALA
SCALE
0 10 20 30 40 50
1: 1000000
KARNATAKA
TAMIL NADU
LAKSHADWEEP SEA
KASARAGOD
KANNUR
KOZHIKODE
WAYANAD
MALAPPURAM
PALAKKAD
THRISSUR
ERNAKULAM
IDUKKI
KOTTAYAM
ALAPPUZHA
PATHANAMTHITTA
KOLLAM
THIRUVANANTHAPURAM
REFERENCE
State Boundary
District Boundary
Important Roads
Railway
Lake and Rivers
Important Places
District Headquarters
Wild Life Sanctuary
National Park
Bird Sanctuary
Land over 1000 m.
Land over 500 m.
Land over 200 m.
INDIA
ARABIAN SEA
BAY OF BENGAL



1. Pintail, male 2. Spotbill Duck, male 3. Gadwall, male 4. Ruddy Shelduck 5. Barheaded Goose 6. River Tern 7. Sandwich Tern



1. Avocet 2. Crab Plover 3. Blackwinged Stilt 4. Least Frigate Bird, male(left) female(right) 5. Bartailed Godwit 6. Blacktailed Godwit 7. Indian Little Ringed Plvoer 8. Spoonbilled Sandpiper

1. Eastern Black Redstart 2. Rufoustailed Finch-Lark 3. Rufousbellied Bush Robin, male 4. Yellow-eyed Babbler 5. Green Munia 6. Red Munia, male breeding 7. Chestnutbellied Nuthatch, male